

Electrical Merchandising



"A Well-Wired Home Is the Best Salesman for Electrical Appliances"

My Three Mistakes in Business—*The Confessions of an Ex-Contractor-Dealer*

How a Sideline of Fixtures Developed Into a \$200,000 Business

Fitting Up an Attractive Electric Shop for \$1,200

—in This Issue

The Simplex with the GREEN HANDLE

-the finest electric iron ever made!

The complete Simplex Cord-Set should be on your counter. Send for special offer.

Nothing like it has ever been seen before. The beautiful moulded handle of green Bakelite—the sturdy Cord-Set with the all-steel plug that won't chip, crack, crumble or break—the Ever-Cool Ball Grip—these new, exclusive Simplex features make this iron irresistible. Every woman who sees it wants it.

To dealers, this New Simplex Electric Iron represents a selling opportunity of untold value. It will sell not only because it is correctly designed and manufactured but because it has an appeal to the eye never before possessed by any iron at any price. Women, everywhere, will want to replace their inferior irons with this beautiful New Simplex. And women who have never before owned an electric iron will say—"This is the iron I must have."

Write for details of special introductory offer.

SIMPLEX ELECTRIC HEATING COMPANY

85 Sidney Street, Cambridge, Mass.

120 West 32nd Street
New York City

15 South Desplaines Street
Chicago, Illinois

The New

Simplex

ELECTRIC IRON

See announcement of New Simplex Spartan Iron on page 106.

The moulded handle of GREEN Bakelite fits the hand ~



\$6⁷⁵
LIST

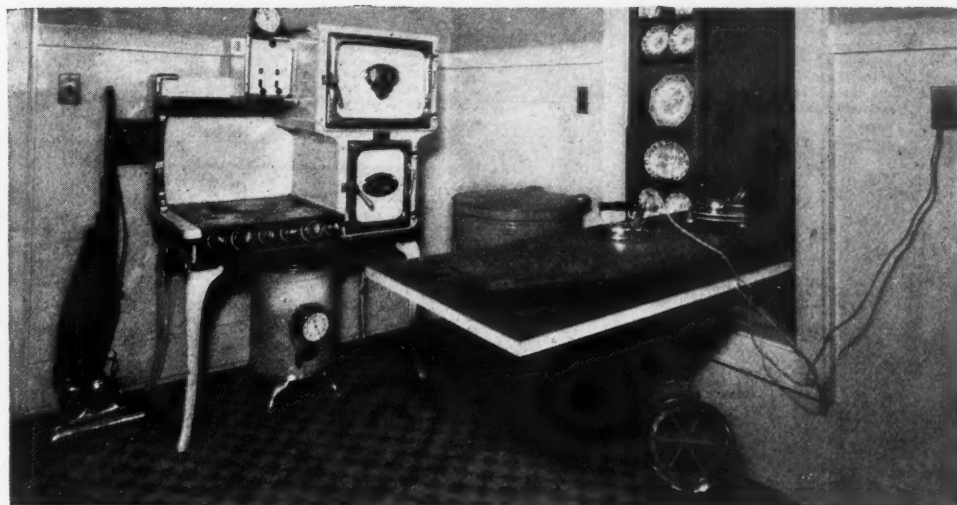
Made by the makers of Simplex Sun-bowls, Heating Pads, Cord-Sets, Ranges, etc.

Electrical Merchandising

Vol. 31

The Business Magazine of the Electrical Trade

No. 4



"A Well-Wired Home Is the Best Salesman for Electrical Appliances!"

YEARs ago, the automobile people realized that "good roads" would result in more automobile sales,—for good roads invite motoring. So the automobile men went after good roads, *hard*,—got them,—and look at automobile sales today!

Convenience outlets and adequate

wiring in houses, stores or offices,—invite the purchase and use of electrical appliances, in very much the same way that good roads invite automobiling and induce auto sales. With convenience outlets installed in kitchen, laundry or bedrooms, the purchase and use of electrical appliances

is inevitable—"a matter of "sooner or later,"—and usually "sooner!"

Do electrical men generally "see" convenience outlets as the "good roads" to electrical merchandise sales? Do we all really realize that "A Well-Wired Home Is the Best Salesman for Electrical Appliances?"

Table of Contents for April

| | | | |
|--|------|--|------|
| Ads Like These Tell the Story | 4214 | Do You Find Trade Statistics Helpful? | 4240 |
| The Confessions of an Ex-Contractor Dealer | 4215 | Systematizing the Electrical Store | 4242 |
| Developing a \$200,000 Fixture Business | 4218 | Reviving the "Dead Account" | 4244 |
| "Fix-Up! Clean-Up!" Time Is Here | 4220 | The "Home Electrical" Section | 4245 |
| How Clark & Mills Sold 1,000 Lamps | 4223 | "Electrical Merchandising" Pictorial | 4253 |
| Here's Another Model Wiring Plan | 4225 | Prying Into Business with a Screw Driver | 4257 |
| Checking Abuse of Exchange Privileges | 4226 | Experience in Paying Salespeople | 4258 |
| What Shall I Do About Radio This Summer | 4227 | Editorials | 4260 |
| Fitting Up an Electric Shop for \$1,200 | 4229 | Ideas for the Man Who Sells | 4261 |
| How a Wiring Contract Was Increased | 4230 | Marketing New Lines at a Profit | 4263 |
| Demonstrating Appliances at Time of Sale | 4232 | Lighting Equipment Sales Methods | 4265 |
| Trade Discounts a Menace to Dealer | 4233 | Sales Helps for the Dealer | 4267 |
| With "Service" as the Watchword | 4235 | New Merchandise to Sell | 4268 |
| Window Display Ideas Make Sales | 4236 | Record of Lighting Fixture Patents | 4271 |
| Making Sure of Your Money | 4238 | News of the Electrical Trade | 4274 |

Searchlight Section, 212

What and Where to Buy, 209

Alphabetical Index to Advertisers, 215

McGraw-Hill Company, Inc., Tenth Avenue at 36th Street, New York

JAMES H. MCGRAW, President
ARTHUR J. BALDWIN, Vice-President
MALCOLM MUIR, Vice-President
E. J. MEHREN, Vice-President
MASON BRITTON, Vice-President
JAMES H. MCGRAW, JR., V.-P. and Treas.
C. H. THOMPSON, Secretary

Cable Address: "Machinist, N. Y."
WASHINGTON, D. C., Colorado Bldg.
CHICAGO, Old Colony Bldg.
PHILADELPHIA, Real Estate Trust Bldg.
CLEVELAND, Leader-News Bldg.
ST. LOUIS, 713 Star Bldg.
SAN FRANCISCO, 583 Mission Street
LONDON, E. C., 8 Bouverie St.

Publishers of
Electrical World Journal of Electricity Ingeniería Internacional
Industrial Engineer Engineering and Mining Journal-Press
Engineering News-Record Coal Age American Machinist
Power Electric Railway Journal Electrical Retailing
Bus Transportation Chemical & Metallurgical Engineering
American Machinist—European Edition

ELECTRICAL MERCHANDISING

O. H. CALDWELL, Editor
Associate Editors EARL E. WHITEHORNE
ROLAND COLE, CHICAGO

Editorial Staff
LIDDA KAY F. R. CLAUSE M. CLEMENTS ROBERT M. DAVIS
H. S. KNOWLTON, BOSTON C. GRUNSKY, SAN FRANCISCO

Member Society for Electrical Development, Inc.
Member Audit Bureau of Circulations.
Member Associated Business Papers, Inc.
Copyright, 1924, by McGraw-Hill Company, Inc.
Circulation of this issue, 14,746

Entered as second-class matter July 21, 1916,
at the Post Office at New York, under the act of
March 3, 1879. The annual subscription rate is
\$2 in the United States, Canada, Mexico, Hawaii,
Philippines, Alaska, Porto Rico, Canal Zone,
Honduras, Cuba, Nicaragua, Peru, Colombia, Bolivia,
Dominican Republic, Panama, El Salvador,
Argentina, Brazil, Spain, Uruguay, Costa Rica,
Ecuador, Guatemala and Paraguay. Extra foreign
postage \$1 (total \$3 or 13 shillings). Single
copies, 25 cents. Printed in U. S. A.

The Confessions of an Ex-Contractor-Dealer

A True Story of a Man Who Wrecked a Promising Electrical Retail Business
by Making Three Common Mistakes

By EARL E. WHITEHORNE

JOHN PARKER made three mistakes in policy and wrecked his business. After the receiver had mopped up the ruins and time enough had passed to soften the sting of failure, I went and asked him to tell me the story. For there is as much profit sometimes in studying a failure as a success.

Parker, before he became a dealer, had been a manufacturer's salesman. Of course that is not his real name. He knew the electrical industry. He saw an opportunity in a prosperous commuter's suburb of one of our large cities, to establish an electric shop with the finest possible class of trade to draw from. It is a town of 25,000 with well-to-do homes in the majority. He formed a small corporation with the backing of two friends, also electrical men, hired a store in—we'll call it Homeville—and went to it with high hopes and enthusiasm. This was in September, 1922.

In May, 1923, he was flat broke. In June he quit. In July his creditors were making charges to their Profit-and-Loss Account. And this all came despite the fact that he had had a good store, and had given good service and earned money on his wiring department. But he had done three bad things that had overpowered all the very good things that he did and made a mockery of ten long months of sweat and tears.

I say that he made three mistakes. Here they are—

First—His location was not quite right. He wanted a store on Main Street in the block near the two theaters but there was nothing available. So he took a store right in the center of town but about two stores down a side street. This street comes in on an angle and his windows face well to the Main Street crowd. He thought they would see

him. They could have—but they didn't. People saw his newspaper ads and then failed to notice his store, so they did not stop. People he phoned said—"Why I never noticed your store—How long has it been there?" It cost him dear. That was his first mistake.

Overburdened with Details

Second—Parker tried to sweep out the store and manage the business too—and it can't be done. He was too busy with today's work to figure out tomorrow's plan. He wanted to economize, so one of his silent partners agreed to keep the books at night. The result was that seven weeks passed before they had a financial statement and when it came Parker was appalled. Customers had been coming in and asking for things. Silver-tongued salesmen had called and teased him to buy, and he had been spending money like a drunken sailor, never realizing it at

all, because he had been so busy building shelves and displaying goods and getting everything fixed. He let his business get away from him by being too busy to think ahead and by working in the dark. That was his second mistake.

Third—He did not establish credit at the outset ready for a day of need. He bought from too many manufacturers and jobbers so that his account was of no particular importance to anybody and nobody was interested to help him when he got in trouble. And when he went to see his bank, they didn't know him. That was the mistake that he discovered last.

I visited Parker's store in the early months and it was most attractive. He had two good windows and plenty of light. Lamps and appliances were displayed on tables where you could see and handle them. There was ample variety of stock, well displayed. A rug on the floor and some wicker chairs gave an air of comfort to the place. Parker himself has a good personality, sells easily and makes friends. He understands how to give service and please customers. He is enterprising and full of pep. He was eager to take advantage of good selling ideas and not afraid of work. But he was new at the retail game, and had never been in business for himself before. And the things he learned in his eleven months' experience would have made a big success of him as a merchant, I believe, if he had not made his three big mistakes and learned his lesson just too late.

I said to Parker—"What have you found out in the experience that should be passed along to other electrical contractor-dealers to protect them against the mistakes that pulled you down?" And this is what he told me.

Twelve Guideposts Away from Business Failure

1. Have daily statements
2. Don't outrun your capital
3. Get the right location
4. Concentrate your buying
5. Establish credit
with your jobber
6. Get a line of credit
at the bank
7. Don't buy too much
8. Start a perpetual inventory
at once
9. Get a cash register
10. Have some variety
in appliances
11. Don't depend upon
people coming in
12. Be careful what men
you send out

1. *Have Daily Statements.* "Above all things," said Parker, "the electrical dealer should have daily statements showing the financial status of his business. If the business isn't worth that it isn't worth working over. Everything may be peaches and cream on Monday and on Wednesday there may be breakers ahead that you must steer away from or you go on the rocks. It isn't hard to do. The Electragists Association's accounting system will take care of you nicely. But you must know where you are at every hour of the day if you are to be safe against the clever salesman who comes in with contagious enthusiasm and runs you off your feet."

Lost Money for 11 Months, Then Failed

2. *Don't Out Run Your Capital.* Parker started out with capital enough, he thought, to carry him alright. He figured on losing money for four months, breaking even for eight months and making money in the second year. But as a matter of fact he lost money for ten months out of the eleven—all except in December—and he didn't have enough capital to see him through, though when he failed he still was solvent on the books.

3. *Get the Right Location.* "Don't take a chance on a wrong location," says Parker, "just because you are eager to get started. I kidded myself into taking a good store just a little off the right street and it was three months before I discovered that my windows could not draw people that far."

4. *Concentrate Your Buying.* The small store merchant should do all his buying from one jobber. "Go to him," Parker says, "and offer him your whole business if he will give you service and advice. I bought from four jobbers and many manufacturers, and so my business wasn't worth enough to any one of them to win me any favors. The salesmen lost interest. When they had special offers to hand out they hadn't time to come to me. They were too busy hustling around to their good customers. I lost much by it. Also I wasted much time talking to too many salesmen who were not taking care of me."

5. *Establish Credit with Your Jobber.* "Discount your bills no matter how it hurts," he added, "and tell your jobber all about your business, as long as he plays ball. Get him interested and if you get

into a jam he will come to you and ask what he can do to help, because he will want to preserve a good customer."

6. *Get a Line of Credit at the Bank.* Parker called at the bank too late. He didn't go until he needed money and then had no statement to get it on. "Don't wait until you need cash," he says, "call on your banker as soon as you start in business and borrow something. Pay it back. Then borrow more. Get them in the habit of loaning to you and expecting you to pay it promptly back. I waited until the end of the ninth month and by then my statement showed—

| | |
|---------------------------|---------|
| Stock Inventory | \$8,000 |
| Accounts Receivable | 2,000 |
| Cash | 500 |

\$10,500

| | |
|-----------------------|-------|
| Accounts Payable..... | 7,000 |
|-----------------------|-------|

\$3,500

My statement showed an equity of \$3,500 and all I wanted was a loan of \$2,000 for 90 days. It would have pulled me through" But the bank said, "Your assets are frozen. If you can't sell them how could we?" "And they were right, so we went bankrupt."

Know Your Stock

7. *Don't Buy Too Much.* One of the things that ruined Parker was trying to get maximum discounts. "The salesmen would come in," he said, "and offer me one fixture or one appliance at 25 per cent off or 45 per cent off on six. I would fall, just trying to buy cheap. But I would sell three and the other three would freeze up on the shelves. I didn't appreciate that turnover was worth more than discount."

Five Things the Boss Should Do

In an Electrical Retail Business

- 1
Teach sales people how to sell
- 2
Maintain contact with customers and prospects
- 3
Watch finances and collections
- 4
Do the buying
- 5
But before all else—
Plan tomorrow's work

8. *Start a Perpetual Inventory at Once.* He wanted to put in a perpetual inventory at once but was too busy in the early days, buying, unpacking, displaying and stowing away stuff, waiting on customers, getting out deliveries and cleaning up. So he had no accurate record of stock and kept running out of things that people wanted and buying more heavily and finally found himself snowed under.

9. *Get a Cash Register at Once.* Parker's partners wanted him to buy a cash register at once but he said "That is one thing we can get on without until we can afford it." "But that is the one thing," he told me that he could least afford to be without. It would have given him an accurate running record of cash transactions and been an invaluable safeguard.

Not Enough Variety

10. *Get Some Variety in Appliances.* Parker took on a full line of only one manufacturer's heating devices and he thinks it was a mistake. He should have had at least two brands of flatirons for instance to give a selection. As it was he says he spent too much time selling the one device and trying to keep the customers from "looking at something else."

So much for the things that Parker did wrong. No man has ever run a store who did not make mistakes and change his policy on many things as he gained experience. Parker found out a lot of other things that worked out right and brought him business. For he was instinctively a salesman and showed a marked ability. The trouble was that he let himself get buried in details and neglected this very job of selling till too late. It was the seventh month, as a matter of fact, before he got things all organized and running free and began to advertise regularly. Yet when his advertising started it was most successful. Here were some of the good things that he found out—

11. *Don't Depend on People Coming In.* Parker says, "Give your advertising everything the traffic will bear. I used the newspapers, monthly letters, special personal letters, and dealer helps furnished by the manufacturers. I put a 2-cent stamp on all letter mailings because I believe that a letter that is not worth 2 cents is not worth reading. My letters and ads in the local newspapers pulled well and people came in with their ads in their hands."

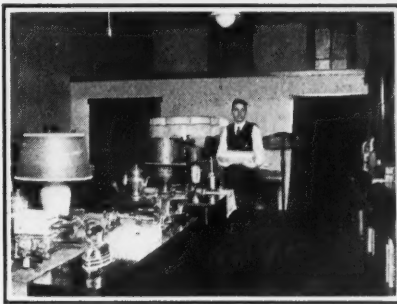
Three Common Causes of Business Disaster

Here Are the Three Things That Wrecked John Parker's Contractor-Dealer Business as He Has Listed Them, for the Benefit and Protection of Other Dealers



Locating Just Out of Touch

HE wanted a store on Main Street but could find nothing, so he located two doors down a side street. But the crowd did not notice his windows, and the shopper did not drop in, and his advertising did not line up with his store.



Too Busy to Plan Ahead

HE tried to sweep up, build shelves, unpack and manage the business, too. He was too busy with today's work to figure out tomorrow's plan. He let his business get away from him by being too overwhelmed with detail and going ahead blindly.



Interesting the Bank Too Late

HE did not establish credit at the outset ready for a day of need, and when his troubles came and he went to ask his bank's advice and help they didn't know him, and had no human interest in his business. The result was not a happy one.

12. *Use Lamps in Telephone Approach.* "I got hold of a clever girl to sell by telephone," he said, "and used lamps as my approach. I worked up a regular line of talk and this girl sold many lamps and many appliances. We offered to deliver one lamp if necessary."

13. *Change Windows Often.* Parker changed his windows often. One window always featured an idea and the other a variety of merchandise with price tags. One window was changed each week. He found that it had a good influence.

14. *Make a Feature of Delivery.* Many friends were made by a liberal delivery policy. He says that anything sold up to the very last hour was delivered the same night. He would go out if necessary and buy at retail at some other store in order to give service and gained many customers by this evidence of interest.

15. *Let Wiring Win You Customers.* Whenever Parker wired a house he put his name on the meter board, indicated the rooms controlled by each fuse, the size of fuse required for each branch block. He put a tag on each fixture recommending the best size of lamps for use on it and their price. It brought many inquiries and many sales.

Parker carried four wiremen and did about 60 jobs during the 10

months and made money on all but one. Most of his competitors were estimating at the rate of \$2.75 an outlet but he figured time and material with an overhead based on the cost of two previous months.

16. *Be Careful What Men You Send Out.* He used special care to send out only men who would not get into trouble. Boneheads who are dirty, noisy, careless or familiar with the servants were discharged.

17. *Use Light in Your Store.* Parker says he used light liberally and had a very good wiring sale because his windows spoke loudly.

18. *Tie In with the Industry.* Every electrical dealer should belong to a good association, Parker says. The dealer, he advises, should tie in with the industry through the Society for Electrical Development and the Association of Electragists and read the electrical papers. "I read *Electrical Merchandising* every month," he told me, "and I kept it handy to show to customers. Many ads and editorial features were most interesting to them and helped make sales."

19. *What the Overhead Should Be.* I asked Parker how many employees the small electric shop should have. He said, "There should be enough to do the work and take advantage of the constant flow of opportunities. There should be a girl on the sales

floor who can help with office work. Get one who can think for herself. There should be a man who can do small wiring and repair jobs and, while he carries his tool bag, bring in necessary information about sales opportunities, look over plans, and get data. There should be a boy to clean up and do errands."

20. *What the Boss Should Do.* I asked him what the boss should do and he said, "Five things:

1. Teach sales people how to sell.
2. Maintain contact with customers and prospects.
3. Do the buying.
4. Watch the finances and collections.
5. And before all else—Plan tomorrow's work."

No one can deny but that it was an unfortunate experience he had but I am glad to say that the time and the labor have not been entirely thrown away. Parker, when the crash came, did the sensible thing and went right to a jobber and got a job selling. The things that he found out as a dealer he is now teaching to other dealers who are his customers and because of his intimate personal knowledge of the electrical merchant's problem he is able to advise and serve them in a way that is winning him new friends and business that is bringing him a well deserved measure of prosperity.

How a Sideline of Fixtures Developed Into a \$200,000 Business

Martin Wright of San Antonio, Texas, Built Up Lighting-Fixture Department by Catering to the Individual Home Owner as Well as Cultivating Building Companies' Friendship

By RUEL McDANIEL

SPECIALIZATION is a fine thing at the right time, but it doesn't pay to specialize on a certain trade when selling fixtures, if the experience of the Martin Wright Electric Company, of San Antonio, Texas, is to be considered as any sort of a criterion. The fact that this company sells about \$200,000 worth of fixtures a year, more than a dollar's worth of fixtures for each man, woman and child in the city, is a good indication that its methods are worth considering.

It should be pointed out, too, that fixtures were taken on, some 20 years ago, as a sideline to the contracting business conducted by Mr. Wright, and this department still is what might be termed a sideline. The business was started in one corner of a little plumbing shop,

and has progressed continuously until now the company occupies a conspicuous building on Houston Street, San Antonio's main shopping thoroughfare, and undoubtedly has one of the best laid out fixture departments to be found anywhere in the Southwest.

"One big reason for our gradual growth," declared T. J. Reneberg, manager of the company, "is the fact that we did not expend our entire sales efforts on a special class of prospects. There are inducements for fixture dealers to spend a great deal of their time in cultivating the trade of the wholesale home builders, such as we have in San Antonio. By securing the business of two or three of these concerns, a fixture dealer has all the work that he can satisfactorily handle. He gets consid-

erably more business at much less effort and selling expense. But suppose one or two of his big customers drop out suddenly? His business is seriously crippled. Sometimes it never entirely recovers from the slump.

"A dealer is in a manner putting himself at the mercy of home building companies and big contractors when he devotes all his efforts to securing their trade. As a rule these people buy where they can get the most for their money. They operate on a small margin and must cut down expenses on every corner possible. If some other fixture dealer needs the business exceedingly bad, he may offer such price inducements that the first dealer is left holding the bag. One cannot blame the builder for making his dollar go as



Distribution of sales efforts to all classes of prospects is claimed to be the secret of the Martin Wright Electric Company's success in developing a \$200,000 fixture business in

San Antonio, Tex. The attractive display room shown here has a special appeal for the woman who desires to beautify her home. But the company's activities do not

stop in the display room. T. J. Reneberg, manager of the company, goes out after the wholesale home builders. All classes of customers are given equal attention.

far as possible, yet it places the man whose customer he has been in a sorry plight when the builder drops out.

"For this reason we have never tried to make this class of trade the backbone of our lighting fixture business. It is desirable patronage, no doubt about it—so long as it lasts; but we have found that it pays to expend our main efforts to selling to the individual home builder. Here the orders are inconsequential in size as compared to the wholesale builders, but each individual owner we sell means a new customer for us and a new booster for our company, if we give him satisfaction. Our profit is usually more per dollar on the smaller sales, too."

The company secures this business from individual builders chiefly through direct letters and personal solicitation. Some institutional newspaper advertising is used, but direct mail is the backbone of the advertising mediums.

The most important source of prospects is through the building-permit reports. These reports are watched closely every day. Other prospects are secured through the co-operation of satisfied customers. The day that the name of a prospective home builder gets into the hands of Mr. Reneberg he writes a personal letter to the person contemplating the building of a new home, or even to those who have extensive repairs under way.

This letter tells of the company's ability to serve in the capacity of fixture advisor and tells of the factors that make it a desirable institution with which to deal. Each letter is individually typed, and they are signed—not rubber-stamped—by Mr. Reneberg.

The letters are followed closely by a solicitor, who calls upon the prospective builder and lays the company's arguments for his business before him in an intelligent manner. There are three outside men who combine solicitation of fixtures and contracting and wiring business; and Mr. Reneberg often gets out and sells too. He finds that it pays to keep in tune with the outside end of the business as well as with the desk work.

The Wright philosophy of selling is to endeavor to act in an advisory capacity. The company's aim is to ascertain the person's ideas as to fixtures desired, take into consideration the class of house to be fitted,

Artistic home lighting, exclusive designs, electric fixtures that are carefully selected and properly placed, will create that atmosphere of beauty and comfort in the home for which every owner is striving.

Because we carry the largest and most complete line of electric fixtures in the Southwest, also andirons, fire sets, and magicoal fires and because we are thoroughly experienced in ways and means of securing the best lighting effects, we are taking this opportunity of inviting you to confer with us now that you are arranging to build a new home.

It will afford us pleasure to furnish technical advice as to lighting arrangements that will give desired effects and to assist in the selection of suitable fixtures for the home you are building.

Such service on our part is your guarantee that your home will be illuminated both artistically and efficiently.

We invite you to call at our store, 308 East Houston Street, or telephone Crockett 4200.

Yours for the best in home lighting.
Martin Wright Electric Company.

This letter creates a desire for more artistic home lighting, and clinches the matter by inviting the prospect to step into the store, or give the company a call by telephone.

the possible interior finish, and by combining these factors with the owner's own ideas, the company is able to work out intelligent suggestions. They do not try any "strong arm" selling methods, preferring rather to supplement the owner's ideas with their experience, and complying with the owner's ideas to a degree that assures his entire satisfaction. It is better to give a man what he wants, as a rule, than to try to convince him that he doesn't know what he wants. Even if your ideas are better, the prospect is more exacting with your plans than with his own.

Customers Are Salesmen

By exerting real effort along individual lines, and making it a point to give complete satisfaction on every fixture job, the Martin Wright Company has built up a list of citizen-salesmen, they might be called, who are boosting the company all the time, perhaps unintentionally, but boosting just the same. This is worth considerably more than the difference in the cost in time and money spent in cultivating this class of business and that of the wholesale builder.

However, it should be understood that Mr. Wright's company does get an enviable builders' trade. During 1923 Mr. Wright supplied complete

fixtures for over 100 medium priced homes erected by a single builder, besides business from others in this same class. But if these wholesalers switch to another electrical shop, which they do occasionally, Mr. Wright has nothing particularly to worry about because he still has an army of satisfied individual customers who are perpetual boosters for his house.

The company makes it a special point to stay a step ahead of the public's demand in fixtures. This is possible only by keeping abreast of the times in the way of fixtures by reading all the good literature on the subject.

Being situated on the chief retail street of San Antonio, there is naturally a good opportunity of selling the store's facilities to the public through displays. Two spacious show windows in front of the building are given over to fixtures.

So symmetrically and artistically is the display room arranged that it cannot but create a strong desire for fixture ownership on the part of anyone who enters the place. There are approximately 750 fixtures and floor lamps in position at all times, yet they do not give one the impression that they are "crowded." The fixtures hang from the ceiling from connections that are four feet apart in each direction. Wall lamps and fixtures are slightly closer, and the floor lamps are arranged according to the size of shade and height of stand.

A special feature about the display is that every one of the 750 pieces is connected separately and controlled by individual switches.

By having each fixture lighted separately it is possible to give it more personality in displaying it. By turning off all lights surrounding a particular fixture and then lighting the one under discussion, the most desirable qualities of that one stand out, because it does not have to compete with other patterns all around it that are equally as attractive. The salesman is able to concentrate his efforts on certain patterns more thoroughly when he is able to manipulate the switches of each fixture individually.

Distinctive furnishings—chairs, tables and rugs—add a final touch to the refinement of the room, all of which play an important part from a psychological standpoint in selling high class fixtures to satisfied customers.

"Fix-Up! Paint-Up! Clean-Up!" Time Is He

The dark days of winter are over. Now is the time to give the store that long-awaited-for ones rearranged and refinished, and numerous changes made, all to ideas on how and what to do. Let them

A Way to Make New Furnishings Pay

THE expense of outfitting a table-lamp display room or department can easily be turned to profit. Here is how. Arrange with a furniture company to install in your store attractive tables on which to display your table lamps. Mark the tables with price tags, and if a customer becomes attached to a particular table while looking over the lamps, sell him the table also. This system is employed successfully in the Lightolier Company's attractive salesrooms on Broadway, New York City. The salesmen, of course, press the sale of lighting fixtures, but are quite willing to "oblige a customer" by selling him a table.

A "Spot" Display Table to Move Stickers

EVERY dealer has old stock he would like to move and novelties he would like to show off. The use of a "spot" display table just inside the front door and a little to one side will serve the purpose. If the display is changed frequently, regular customers will acquire the habit of looking there for something new. Even "dead" stock is novel if suddenly brought to light. The position of the table is such that the

display is thrust before the customers both on their entering and leaving the store. If stock can be moved, such a table will move it.

To Keep Show Cases Clean

DIRTY glass on show cases is an unpleasing sight to fastidious women visitors. Cleanliness in displaying electrical equipment, especially that which goes into the home, is as essential as neatness in the display of dress goods and other merchandise outside of the electrical line. Here is a practice that might well be adopted by electrical retailers. Each show case in Gimbel Bros. electrical department, New York City, is provided with a bottle of ammonia and a piece of white cheesecloth. Clerks are instructed to clean the glass of finger marks at least twice a day during their leisure moments.

How About the Floors?

WOODEN and cement floors have been found by most dealers to be constant sources of annoyance. Wooden floors become stained and scratched, while cement floors are uncomfortable for the feet and show dirt easily. Spring store cleaning time is the time to consider changing the floor covering. Heavy linoleum has been found to be both serviceable and pleasing to the

feet and eye. A simple block design produces an illusion that tends to hide scratches and dirt. Tile or composition flooring is attractive and serviceable, but more expensive than linoleum. Either tile or linoleum can be covered with mats or rugs if desired. Linoleum ranges in price from about \$1 to \$3 per sq. yd.; composition, from 50 cents to \$1 per sq. ft. laid on the original wood floor; and marble or tile, from \$1 to \$1.50 per sq. ft., with perhaps additional charge for altering floor base. For a store 20x80 ft., the cost for covering with linoleum at \$2 per sq. yd. would be approximately \$356. The average cost of composition flooring for a 20x80 ft. store is usually out of the question for a small business, running to approximately \$1,000; and to \$2,000 for tile or marble.

Comfort for Customers' Feet

SOFT carpet or rugs in the lighting fixture department go far to produce that "atmosphere of ease" that is a potent factor in selling equipment for beautifying the home. The effect on the potential purchaser is immediate when he or she steps into the fixture room. The soft carpet pleases both the eye and the foot. The same holds for the radio demonstration room. The nature of the floor should usually determine whether carpets or rugs are to be laid. Unless the floor finish is especially attractive, such as tinted tile, carpets extending to the baseboard will usually be found more pleasing to the sight and more serviceable. Small rugs of 27x54 in. size will cost from \$4 to \$16, according to the quality desired. The 36x63 in. size costs between \$8 and \$24. Carpets run between \$2 and \$5 per yd., in yard strips. Thus a \$3 quality carpet on a 15x20 ft. floor costs \$100.

Eliminate Those Electrical "Junk Heaps"

THE time has passed when the up-to-date electrical dealer is satisfied with home-made wall shelves on which are thrown miscellaneous boxes and appliances in confusion. Conservation of display space and neatness are two requisites for the modern store. Surplus stock nowadays is stored in drawers, under or behind counters, behind panels, or in the stock room. All available space on the walls that were once covered with displeasing shelves is now glassed in, or otherwise used for display purposes. The C. C. Bohn Electric Shop, 820 Sixth Avenue, New York City, has found the panelled wall case a practical display device. Stock is stored in drawers and pigeon-holes in the wall. The fronts of the drawers and of the hinged doors which inclose the pigeon-holes are glassed in so that one sample of each device is exposed to view between the glass and the backboard. The services of a local cabinet maker can be secured to make alterations on cases already installed; or a reliable show case company can supply attractive cases suitable for the display of electrical appliances. Complete wall cases can be purchased at prices rang-



The details of this picture are worth studying. It shows the attractive appliance salesroom of the United Electric Light & Power Company, Eighty-ninth Street and Broadway, New York City. Space is conserved in this salesroom by surrounding the pillar with showcases, on which are displayed lamps connected with the convenience outlets in the pillar. The mirror

backgrounds in the showcases, the glass shelves, and the absence of the usual wide wood rims on the showcases increase the attractiveness of the displays. The neat marble baseboard of the low showcase and the legs on the wall unit prevent the unsightly scratches that appear on wooden baseboards. The floor is of checkered composition.

Here—Put These Hints to Work in April

for
d to
em

overhauling. *Painting must be done, new show cases and displays installed or old attract more customers and more dollars into the store. Here are 29 start to make money for you this month*

ing from \$175 to \$275 for each four-foot unit, according to the type desired. Substantial and attractive floor cases may be purchased at prices ranging from \$8.50 to \$28 per foot.

Have You an Awning?

ON rainy days a window without an awning is like a store without a roof. No one will look over your window display when water is dripping down his neck. A proper awning will attract passers-by under its sheltering roof. While waiting for street cars or jitneys, or for the downpour to subside, the crowd can then look over your display. On sunny days, also, the awning has its uses. It will protect displays from the damaging rays of the sun, and avert the troublesome reflections that shut off a clear view through the window. Good awnings suitable for an electrical store may be purchased at prices ranging from \$2.50 to \$5 per front foot. The average cost for a 25 foot awning is \$100 or \$125. An awning is usually a good investment.

Awnings Make Valuable Advertising Space, Too!

DON'T waste the space on your awnings. It is valuable. Let the passers-by on the other side of the street know that yours is an electrical store by publishing it on the front flap. If there is a tall building across the street, use the top for the same purpose. Signs on the side flaps will catch the eyes of persons on the same side of the street as your store. Don't waste good space.

Spread Rainy-Day Mats

A RUBBER or coco fibre runner-mat leading from the front door into the store approximates an invitation to the passers-by on rainy days to "bring your muddy shoes inside." Unless the passer-by has the definite intention of making a purchase, he will hesitate to track mud into the store on the mere excuse of getting in out of the rain. The mat running down the center of the store will overcome the passer-by's hesitancy and make him a prospective purchaser of electrical goods. The mat is also an economical preserver of polished floors. Coco fibre mats of 27 or 36 in. widths run at approximately \$1 and \$1.25 per yd. Rubber mats in yard widths average about \$1.75 per yd.

The Aristocracy of Velvet

AN enviable touch of dignity is added to any display that is shown on a background of velvet, sateen, cotton crepe, brocaded silk, or cretonne. Several practical uses to which draperies of the above materials can be placed are: Front window floor covering, drapes for window background, and covers for portable-lamp and appliance display tables. The merits and disadvantages of the respective materials, together with their range in prices, are: Velvet, aristocratic, expensive, atmosphere

of warmth for winter, serviceable, collects dust—50 in. width at \$2.25 to \$7.50 per yd. Sateen, inexpensive, atmosphere of coolness for summer use—50 in. width at \$.69 to \$1.50 per yd. Cotton crepes, inexpensive—30 to 36 in. widths at \$.30 to \$.45 per yd. Brocaded silk, aristocratic, expensive, cool—50 in. width at \$2.97 to \$19 per yd. Cretonne, inexpensive, cool—30 to 50 in. widths at \$.30 to \$.6 per yd. The most desirable size, if only one drape is to be purchased, is usually that which will just cover the floor of the front window. "Electrical blue" makes for an effective display, although many dealers have found dark brown to be the most practical all-round color.

Height of Window Backboard

"HOW high a backboard, if any, should I have for my front display window?" This question is asked at some time by every dealer who desires to attain the highest effectiveness in his window display. Various authorities hold conflicting views on this point, so the ultimate decision lies with the individual dealer. Here are some pointers. Except in isolated cases where the interior of the store is intended to be exposed to view from the street, the backboard less window is ruled out by authorities on the ground that it destroys the appeal of the window display. The high backboard that entirely incloses the window makes for the most effective display, but a great disadvantage is that it shuts out

daylight from the store. The panelled background that ends at eye-level combines the effectiveness of the high background and the good-lighting qualities of the open window. The space above the panels can be left open or filled with glass. If the dealer considers the interior of the store especially attractive, he can construct his window backboard so it will be just a few inches below eye-level. Otherwise, it is considered best by many authorities that the backboard be raised above eye-level.

Window Stickers for Small Articles

THE floor or backboard of the average window is a poor place to show off small articles or supplies. The problem of "making passers-by see them" has been solved by one dealer by the use of paper stickers. With these he pastes small articles on the inside of the window at eye-level of passers-by. This novel trick is a sure "attention getter."

Display Pedestals

WOODEN pedestals of various heights are handy adjuncts to window and interior displays. Their movability makes possible a variety of uses to which they may be placed. In the window they may support small appliances that would sink into insignificance if placed on the floor. For



Effective use of the "alcove" idea, borrowed from clothing stores, is made in the new appliance salesroom of the Danbury & Bethel Gas & Electric Company, Danbury, Conn. With panels substituted for mirrors, the alcove makes a pleasing way

of showing large appliances, which are thus set off from other displays. The above picture also suggests how walls can be utilized to the best advantage in exhibiting small appliances. The finish of the woodwork is silver gray.

window displays they may also be employed as supports for draperies. When a change is made in the window display, the pedestals can well be used to support table lamps and other appliances in the store proper.

Lamp-Shade Covers Keep Off Dust

DUSTY shades are hard to sell. Cheese-cloth or glazed covers will protect silk and parchment lamp shades from dust and flies which cause rapid deterioration in the appearance of shades. Some dealers cover their shades only at night, but A. H. Hale, Danbury, Conn., dealer, believes it advisable to keep the shades covered at all times except when they are being shown to customers. Open shelves can likewise be protected from dust at night by the use of curtains hung on rods or hooks.

Smiling Store Fronts

BEAUTY may be only skin deep, but the public doesn't stop to figure that out every time it wants to make a purchase! The electrical store should lead its community with an attractive store front, rather than lag behind. Make your store front smile at the passers-by, and the passers-by will reflect back golden smiles of dollars. If the front is wood, repaint it,—perhaps "electrical blue." If it is copper or other polished metal, give it a good shine. Repeat this as often as is necessary to keep it shining. If you expect to make some alterations, consider the practicability of a metal store front, perhaps with a tile or marble base. Metal store fronts for the average 25-foot store, with center entrance, will cost from \$600 to \$900. These figures include an attractive tile or marble base.

As to Signs on the Windows

NO ONE doubts the advisability of using the front window pane as an advertising medium. The point that is often overlooked is the effect of a window sign on the inside display. When signs are being placed on the pane, they should be so arranged that the clear view of the window display by the passers-by is not obstructed. Lettering across the top of the pane and small signs in the corners or sides have usually been found to be the most satisfactory. In most cases the lettering should be small and neat.

Hiding the Pillars

THE troublesome pillar that arises in the middle of the store can be turned into an asset by the proper arrangement of show cases. The Brown-Dorrance Electric Company, Pittsburgh, has solved the pillar problem by surrounding the pillars with show cases faced with sliding glass doors that permit easy access to the appliances on display inside. The cases are closely fitted around the pillars on which are mounted convenient outlets. Wires leading from these outlets serve to light table lamps on display on the tops of the cases.

Capitalizing Sidewalks

YOU pay rent for your sidewalk. Why not use it? The simplest use to which it can be put is as a support for a two-way bulletin board for the announcement of sales, etc. Metal, tile, or glass insets spelling the name of the store in the cement are

both attractive and effective advertising. Glass insets may also be employed to furnish light for the basement. At night the process can be reversed. Light can be flooded to the street from the basement. Some cities allow dealers to advertise on the sidewalk with whitewash.

A Balcony Adds Space— Gives Supervision

IF you have a mezzanine in the rear of your store, are you using it to the best advantage? If you haven't one, such a balcony may be worth considering, providing that your ceiling is sufficiently high to permit it. Experience has suggested several valuable uses for a balcony. One Illinois dealer has placed his lighting fixtures on a balcony where the customers' attention will not be distracted by other appliances. Other dealers have devoted their balconies to offices. Under this arrangement the proprietor or the book-keeper has a view of everything that is going on in the store from the office. Under any arrangement a mezzanine is a conservation of valuable space.

Unightly Baseboards

MANY showcases and walls, otherwise attractive, lose their neat appearance because of scratched and stained baseboards. Wooden baseboards will soon show unsightly rims along the bottoms, resulting from floor scrubbing and shoe scratches. If you are doing any remodeling or making any new installations of show cases this spring, consider the advantages of tile or marble baseboards. They will hold up under hard knocks and will give the store a distinctive appearance. The unsightly rim on the showcase can also be avoided by raising the case from the floor on legs. Marble or tile baseboards, six inches in width, for walls or showcases should cost approximately 75 cents per running foot, installed.

Movable Screens

A WINDOW display whose materials are used twice is just half as costly as one whose materials are used only once—and so on in indirect proportion to the number of times the materials are reused. Instead of constructing expensive window sets, or worse yet, of erecting cheap looking sets, many wide-awake dealers have found it profitable to use composition wall board made up into hinged screens. At a small expense these can be repainted to suit the color scheme of the individual display. Their pliability makes possible a change in the shape of the window by the mere rearrangement of the joints. Such screens may also be used to advantage inside the store to set off departments. In the window or in the store they may easily be repainted to harmonize with any color scheme, and can serve as racks on which draperies or appliances can be hung.

Chairs for Customers

A FEW comfortable chairs in the lighting fixture and radio departments create a home-like atmosphere that greatly aids the salesman in putting over a sale. If the customer can be gotten into an easy chair to listen to a radio program or to look over attractive lighting fixtures, he will be strongly tempted to take away with him a radio set or portable lamp to make his own home more home-like.

Lamp Display Rack Attracts Attention

THE idea of a lamp display rack is an old one, but many dealers are still doing business without convenient apparatuses for displaying and demonstrating lamps. The most practical rack is that which consists of several shelves wired for outlets. Samples of the various lamps are screwed into sockets on the shelves. Each socket is equipped with a separate chain for lighting the lamp individually. With the rack so placed that the customers can light the lamps themselves, the sales are bound to increase.

Permanent Window Background

THE problem of arranging an attractive window display that combines beauty and dignity is half solved by the use of a permanent panelled background, according to many successful dealers. This type of wall, done in mahogany, cherry or natural wood, is suitable for the display of almost any type of electrical fixture and appliance. When it is desirable to cover the background, it can easily be done with composition wall boarding, draperies, or cardboard displays furnished by jobbers and manufacturers.

"Dealer Help" Rack Near the Wrapping Counter

A PAMPHLET rack located near the wrapping counter where clerks or waiting customers may handily pick up copies of the *Home Electrical* and "dealer helps" to insert in packages going out of the store, will aid in spreading the electrical idea. Perhaps the customer has been attracted to some appliance while making other purchases, but has failed to buy that particular article. A pamphlet showing the uses of that appliance may be just suggestion enough to prompt the customer to return to the store. A simple wooden rack is easy to install and should increase sales.

Window Display Rack for Small Appliances

A RECTANGULAR sheet of glass, four hooks, and two cords or chains comprise the simple equipment necessary for the installation of an effective device for the display of small appliances and fixtures in the front window. Both ends of the cords are attached to the ceiling so as to form loops that pass under the ends of the glass which is suspended at the level of the eye. The use of hooks in the ceiling will simplify the installation and removal of the rack.

Let Customers "See Them- selves as Others—"

DEALERS who have installed mirrors in the backs of their show and wall display cases declare themselves enthusiastic over the results. The effects produced by mirrors, especially in the display of nickel-plated and aluminum appliances and glassware, are especially striking. The New York Edison Company's show room at Fifteenth Street and Irving Place, New York City, has mirrors installed in all its show cases. Mirrors in wall display units that reflect both the appliances and the customer's face, are held to be particularly effective.

How Clark & Mills Sold 1,000 Portable Lamps

Brusque "Approach" Adopted by Salesmen of Boston
Electrical House Opens Way to Demonstrations

IN THE past few years the Clark & Mills Electric Company, which has a retail store in Boston and another in Cambridge, Mass., has sold more than 1,000 table and floor lamps equipped with flood light reflectors, chiefly through demonstrating one of the lamps to a customer whenever the opportunity presents itself.

The method of demonstrating the lamps is as unusual as it is effective. It is carried out as follows:

Put yourself in the place of a customer. Let us suppose you go to one of the two Clark & Mills stores to purchase an electric bulb, a household appliance or some other article. Before you leave the salesman suddenly exclaims to you:

"With your permission, I would like to teach you how to read."

You look at him in surprise. Finally you mutter rather sheepishly: "I don't just get what you are driving at."

"Please step this way," the salesman replies. He escorts you to the lamp department, hands you a catalogue or some other book with printed matter in it, snaps on a floor or table lamp beside you and asks you to see if you can read from the catalogue or book.

You can, but not without straining your eyes.

Then the salesman asks you to go to a corner of the room, where, with the regular lighting, it is very difficult if not almost impossible to read the book or catalogue. Presto! The salesman snaps on a large floor lamp equipped with a patented reflector which casts a flood of light to the ceiling from a 100, 150 or 200-watt Mazda bulb and the light is consequently reflected to every nook and corner of the room.

"Now look at the catalogue, please," the salesman requests.

You glance at it. You can read it as easily as if you were out in the mid-day sun. "That is fine!" you say, or something to that effect. Then you begin to ask questions about the lamp, including how it works, the cost, etc. If you haven't got some extra good lighting arrangement for

reading in your home the chances are strong that you will have decided to purchase one of these lamps before you leave the store.

This demonstrating plan has been worked on all kinds and classes of people. None has ever taken offense at the rather abrupt way in which the interest in the demonstration is first aroused by the salesman's offer to show the prospect how to read. In fact in the Boston store, which is located in a vicinity where there are several colleges, many professors and students have not only purchased one of the lamps after a demonstration but have thanked the salesman for "teaching them how to read" in comfort and ease with flood

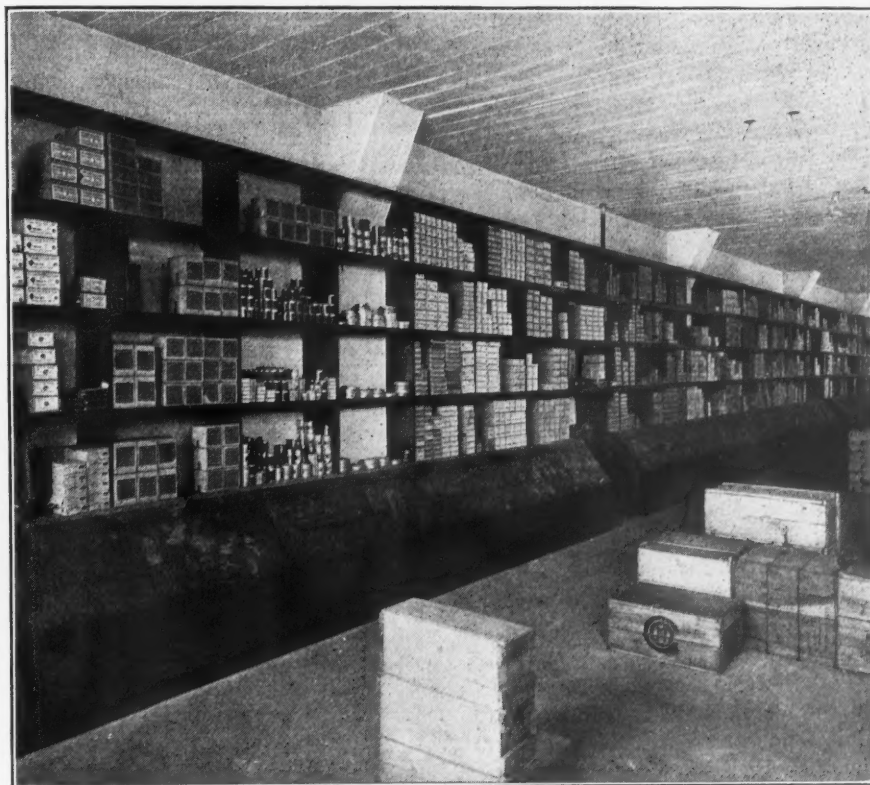
lighting instead of dingy "local" lighting at a table.

Recently one of the proprietors of the company tried the demonstration on a well known college president in practically the manner described in this article. "I never saw anything to beat it," exclaimed the famous educator. "You have sold me one of these lamps."

A Crushing Question

"How does your Lighting Equipment compare with your New Spring Hat?" solemnly asks the Tri-City Electric Company of Moline, Ill., in one of its spring-time ads. That's putting it up to 'em properly, indeed, and one can imagine many a Moline housewife remorsefully surveying the thoughtlessly-acquired headgear and reflecting, "Now, instead of this, I might have an extra outlet next to the serving table, or an outlet to connect the floor lamp near the piano! Oh, why didn't I think of that before?"

Boxed Material in Aisles, Broken Packages on Shelves



One of "the most up-to-date jobbing houses west of the Rocky Mountains" is what J. A. Kahn's Capital Electric Company of Salt Lake City is called. This company occupies a four-story building in the main Salt Lake business district, which is modern in the least detail. It was planned and built with the needs of the concern specifically in mind and has afforded opportunity for the introduction of many new ideas and conveniences.

A model system of storage which provides for the stacking of boxed material in the

aisle with all broken packages stacked on the shelves opposite, provides for neatness of appearance in the warehouse as well as for the expeditious filling of orders. Covered bins, an idea which originated with this firm, contain the small material which is apt to become shopworn and tarnished in open storage. A card index system is kept in the main office showing the name, catalog number and shelf location of all articles in stock—and partial lists covering each floor are provided for the convenience of the attendant in that department.

What a House-to-House Salesman Learned About Selling Washers

Five Lessons Out of Practical Door-to-Door Experience,—as Told to

FRANK H. WILLIAMS

FIRST—The hardest time to interest a woman in a washing machine, in my experience, is at the time when she is doing a washing. The easiest time to interest her is right after she has completed a big washing. Consequently, in selling washing machines by house-to-house canvassing I have always found it a good plan to make a note of the houses where washing is being hung out and to then call on those houses the next day. It is best, too, to make notes of such places because nowadays people wash on "any old day" of the week, instead of only on Mondays, so you can't be at all sure you are visiting homes right after wash day when you call on them on Tuesdays.

Second—The most effective opening I have ever used in getting an interview with a housewife is to say to her when she comes to the door, "I've come to do your next washing." This always makes a woman take notice because it is altogether likely that no one has ever before volunteered to do such work for her. So she immediately wonders what's the matter with me and whether I really mean it or not and this leads to an explanation and to a specific proposal to send a washing machine to her home and actually do the next washing for her. I've made quite a number of sales with this opening which, I feel sure, would never have been made otherwise. This opening, too, is the most effective one I know of for getting the interest of a housewife at that hardest of all times—when she is doing her washing, as I've said.

Third—It is always a big help in getting a housewife interested in what I have to say to be able to tell her that I've done a washing for a friend of her's or that I've sold a machine to one of her friends or relatives. So every time I go into a home and do a washing and every time I make a sale of a machine, I always make a point of asking the folks for the names and addresses of some of their friends and relatives

who might be interested in washers. Then, before I do any other work in the selling of machines, I go to these people and tell them about the washings I've done or the sales I've made. All of this gets over big with the folks and is of tremendous help in making more sales.

Fourth—It pays to be neatly but unobtrusively dressed. I've tried all methods of dressing and I've found this to be the fact through actual experience. When a house-to-house salesman is too gaudily dressed the women at once take notice of it and set him down as being a gambler or a green goods man or something like that. Or they make up their minds they're not going to buy anything from him and help him dress like a regular young sunburst. On the other hand the house-to-house salesman who is

shabbily dressed always and inevitably makes a bad impression on people because it makes them subconsciously feel that he isn't making a success of things and if he isn't making a success they argue that it must be because the things he is selling are no good.

Fifth—It never pays to be "fresh" or to "kid" the housewives. I find that the best attitude to assume in getting business in house-to-house canvassing is that of being perfectly serious and matter-of-fact. The truth of the matter is, as I see it, that not very many women have a real sense of humor and so become suspicious of the solicitor who adopts a tone of levity or tries to spring jokes.

These are the principal things I've learned in making a success of my work and here's hoping they will prove of help to others.

"Spark-Plug" Was This Window's Theme

The Cope Electric Company of Santa Ana, Calif., recently put over a show window which made a lot of folks stop, look and talk.

The display consisted in arranging some double-plugs in such a way that they had a general resemblance to a horse. A little covering was stretched over this frame and labeled "Spark Plug." A little red lamp in the horse's head gave it an eye.

Around the horse were grouped the names of some of the cities that the famous Sparkie is supposed to have visited. In other sections of the window were shown some of the plugs that had been screwed together to make Spark Plug. With these other sockets were signs of similar nature to the following:

"Sparkie is some plug."

This window not only helped the store by attracting the attention of window shoppers, but the store also cashed in on it in another way.

A photograph that was taken of the display was run in the company's regular newspaper advertising with some strong copy urging people to come to the window and look at the display, and also urging folks to come to the store to buy the plural sockets used in making the horse.

Couldn't other stores hook up with this famous comic strip character in the same way?

Sell Them as Gifts for Easter and Spring Weddings, Too

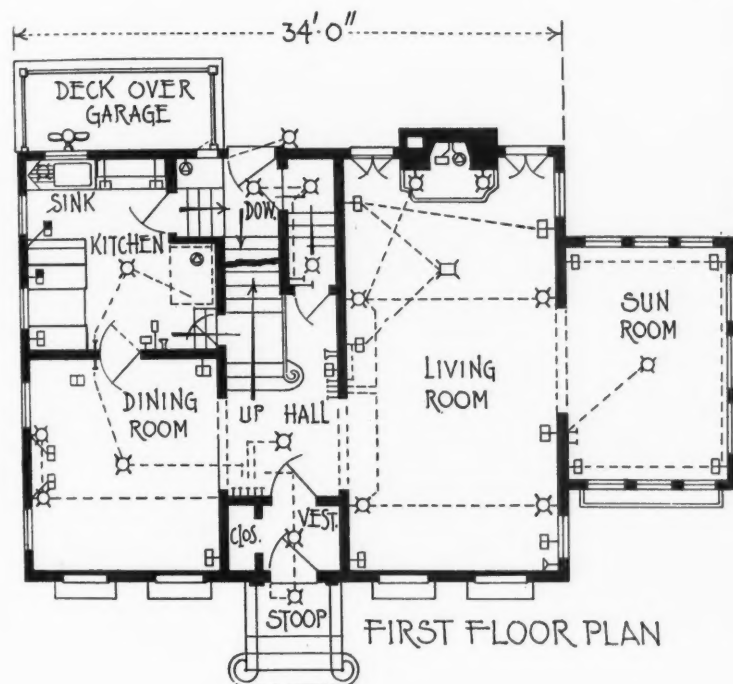


Electric appliances for spring wedding gifts were coupled with Easter advertising of the Commonwealth Edison Electric Shops of Chicago.

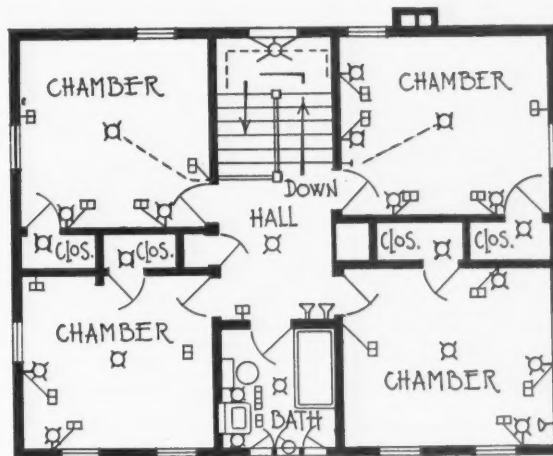
"Every woman who keeps informed on the new electric equipment for better home-making," said the advertisement, "will surely want to see this year's exhibit. We call these our 'come-out-of-the-kitchen' appliances, because they make possible the pleasant table cookery. Spring wedding gifts are also suggested by this display and may be chosen now for future delivery."

Here's Another Model Wiring Plan for a 100 per Cent Electrical Home

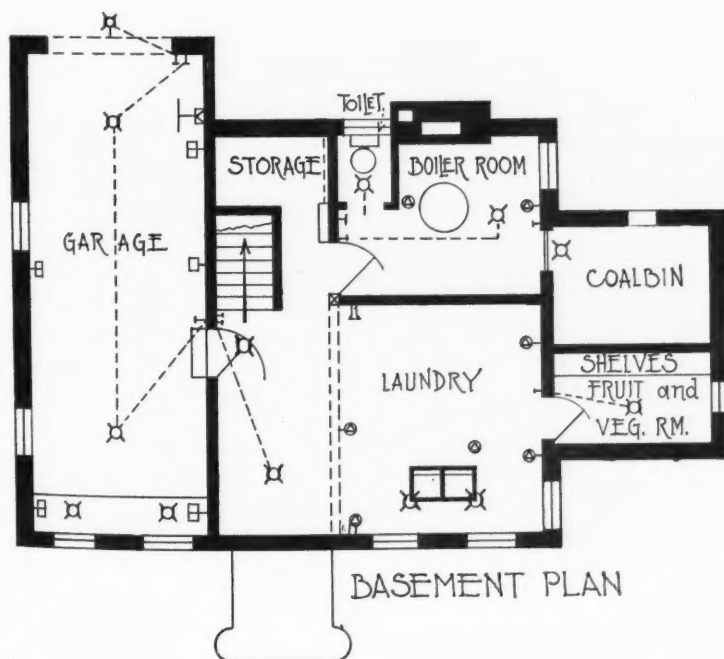
Locations of Convenience Outlets, Step-Saver Switches, Radio Connections, Power Outlets, Telephones, etc., for a Modern Seven-Room Dwelling with Garage and Laundry



ELECTRICAL men can use this wiring plan in emphasizing to the householder and his architect the story of electrical completeness. By referring to the legend, it will be seen that there is a total of 150 convenience outlets. All feed lines are brought into the house through underground conduits thus eliminating all unsightly overhead wiring and providing absolute safety.



SECOND FLOOR PLAN



- ⊗ Ceiling Outlet
- ⊗ Bracket "
- Floor Receptacle
- ⌋ Telephone Outlet
- ⌋ Radio Outlet
- Power Outlet
- s Single Pole Switch
- s3 Three Way Switch
- s4 Four " "
- ⊞ Duplex Receptacle
- ⊞ Receptacle with Switch
- Single Receptacle
- ⊞ Annunciator
- ∞ Ventilating Fan

How Vick Checks Abuse of Appliance Guarantee and Exchange Privileges

Houston, Tex., Firm Keeps Record of Merchandise Sold and Prevents Circulation of Stolen Goods

WHILE transforming its sales system from one that requires that products sold in the homes of the buyers into one that brings the buyers into its store, the A. T. Vick Electric Company of Houston, Texas, is taking precautions to counteract abuses of guarantee and exchange privileges.

This concern has dispensed with all house-to-house solicitation in selling electrical merchandise. Instead, its sales efforts are all bent in the direction of those usually employed by merchants distributing clothing and shoes. The customers are being drawn to the Vick store.

What the Vick company is seeking to do is to establish itself as standing behind the merchandise it offers. Of course this means it must make good all defective merchandise, repair all merchandise according to guarantees, and otherwise give service in keeping with the Marshall Field slogan that "the customer is always right."

But the Vick company proposes to be better than the merchandise it sells and not the merchandise sold by another firm, frequently in another city. The experience of this firm is that dishonest persons abuse the privileges of honest persons to such an extent that it is detrimental to profit.

A system has been introduced to keep a record of each electrical appliance sold. These records will be permanent, being taken from daily sales and filed by months. When there is doubt as to the responsibility of this firm, these records will be consulted to determine responsibility.

When any appliance is sold, a complete record will be taken. The article, its description and the purchaser will be listed. The buyer will be given a duplicate of this description.

Then should the appliance be brought to the store with a complaint as to its performance, these records will be available to establish the fact that the product came from the Vick store.

A. T. Vick, proprietor of this concern, is an advocate of the intro-

duction of serial numbers in the manufacture of all electrical appliances. With this, he says, it would be a simple matter to keep a record of all sales, as serial numbers could be added to the description, making a record that would be upheld even in court.

Without the serial number, any record of sales will have its shortcomings in his opinion. He believes any system of record keeping will counteract the practice of persons bringing an appliance to one store and demanding its exchange, when the product has been bought perhaps in another city.

But for finding stolen goods, he says the serial number system is the one method that will bring relief. If electric irons were numbered serially, he says the numbers could be entered in the inventory, then a record kept of all sales. Should any of these irons be stolen, a check of the stock left with sales against the inventory list, would reveal what products were missing and a bit of advertising would inform other dealers to beware of buying the irons indicated by the numbers.

Serial Numbers Needed on All Appliances

"It seems peculiar that electrical appliances are not numbered when manufactured," he said. "Except vacuum cleaners we have no household electrical product that is sent to us with serial numbers. And practically every one of these products could be numbered with little trouble."

To offset the lack of serial numbers, Mr. Vick is considering a plan of attaching a nameplate to appliances sold from his store. He will not decide on the adoption of this until all costs have been calculated. What he proposes is to attach a metal nameplate to each appliance as it is received. These plates will be attached with screws. Should any appliances be stolen, the removal of these nameplates will be necessary before they can be sold.

The presence of nameplates also will aid in the system of record keeping already adopted. For the

presence of the nameplate will establish the fact that the product is from the Vick store. Its removal can be verified through the finding of the screw holes by which the plate was held on.

Lack of unfailing identification is one of the serious drawbacks in the selling of electrical merchandise, in the opinion of the Houston dealer. While he is determined to correct it in as far as he can, he is an advocate of an identification system that will be national. What he recommends is serial numbers for every product that will carry it. Even for expensive lamps, he believes a permanent identification mark could be etched in the glass, making them less attractive to burglars.

Dealer Cannot Now Trace His Losses

"Electrical merchants lose more goods than they suspect," he says. "Because of no method of identification, a dealer can not keep trace of his losses."

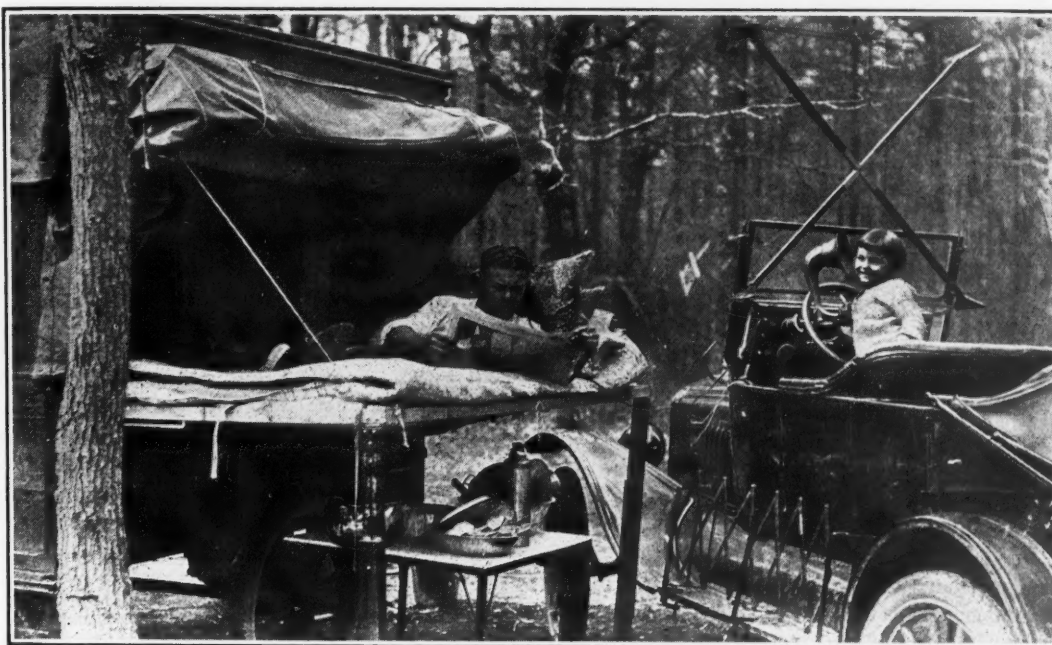
"Not long ago a man brought an electric iron in this store and offered it for sale. It was one of the make we sell. It showed no sign of use. It was sent upstairs to be tested. While that was being done, the man slipped out of the store."

"We got that iron for nothing. I often wonder if it was one taken from our store. If identification had been possible and we had taken advantage of it on receiving all our irons, we could have told if it belonged to us. If it had borne a serial number, we could have advertised and learned who did sell it. As it was, the man got scared, thinking we could identify it, and we gained an iron for our stock."

"Of course one electric iron is not of sufficient value to warrant the adoption of some identification system. But this one instance does show how the effort is made to dispose of such property, also how an unfailing identification method would thwart such disposal, and finally how futile it is to try to trace the source of such property."

Feature Electric Heaters in April Advertisement

For an April advertisement, the Commonwealth Edison Electric Shops, of Chicago, pushed electric heaters, "Steam Now Off" in apartment houses, use electric warmth for chilly mornings and evenings."



Omar Khayyam, the Persian poet, in his immortal quatrains, eulogized the great out-of-doors, in the words, "and thou beside me singing in the wilderness, and wilderness

were paradise enow." Omar's source of inspiration was vital in their days, though one which would be frowned upon by Volstead, nevertheless were he a contemporary,

we believe he would eagerly forsake his jug for a place beside the jug-shaped dispenser of happiness and cheer, shown in the picture above.

What Shall I Do About Radio for This Summer?

Answer to Dealers' Query Is Found in Combination of Circumstances and Events—Indications Are That Interest in Radio, and Resulting Radio Sales, Will Go On Without Any "Spring Drop" or Warm-Weather Slump, If Dealer Will Do His Part

WHAT plans shall I make for selling radio this spring and summer?" dealers everywhere are asking.

Although the past two summers since the development of radio broadcasting have been marked with "spring slumps" and hot-weather "falling off" in radio sales, it is now becoming evident that radio interest and radio sales,—both of which are today the greatest in their history,—are not going to fall away with the coming of the summer of 1924, but are going on to new records of activity during the months now just ahead!

Dealers who are ready to *push radio sales all summer*, will find themselves assisted by a remarkable combination of circumstances and events which will keep radio in the public mind and on the public's tongue all summer long. These forces which are combining to "Make This a Radio Summer" are:—

National Political Conventions to Be Broadcast—

BOTH the Democratic National Convention to be held in New York and the Republican National Convention to be held in Cleveland during the month of June, will have their proceedings broadcast by radio, so that members of the general public all over the country can "listen in" to the speeches and events on the floors of the respective conventions. The tremendous popular interest in these conventions is sure to result in wide purchases of radio receiving equipment. The business will go to the wide-awake dealers.

Coming Presidential Campaign to Be Conducted by Radio

FOR the first time in the history of the world, a campaign for the election of a President of the United States will be conducted almost wholly by radio. Candidates for the

great office will thus be able to reach millions of voters, whom they could not otherwise address in a year's laborious travels. The campaign will be starting in earnest by the latter part of August, and will be on at high speed by September and October, stimulating further the demand for radio sets by voters who want to listen with their own ears to presidents, senators, cabinet members, congressmen, and other well-known political figures.

MacMillan's Dash for the Pole to Be Reported by Radio

THE summer of 1924 will also be notable for the attempt of Explorer MacMillan to reach the North Pole, carrying with him a radio outfit by which he hopes to keep in touch with civilization all during his efforts, and to report his success directly through the air, "Station North Pole speaking." Dr. MacMillan has spent the arctic winter, frozen

in, awaiting the summer thaw for his final dash, but has reported himself and crew as being very enjoyably entertained all winter long by the broadcast programs reaching him from civilization. Radio listeners with good sets may therefore this summer be able to follow Dr. MacMillan's polar adventures, first-hand—from their own porch easy chairs!

Sports, Music, Plays, Famous Speakers—Better'n Ever!

ALL important sporting events occurring this summer,—games, contests, etc.,—will be reported by radio. Famous bands and great orchestras will dispense their melodies and music to millions, instead of the mere thousands within ear-shot of their instruments. Radio versions of well-known plays are constantly being broadcast, and selections from New York successes and musical entertainments are regular features "on the air." And of course, this summer America will have more famous visitors from abroad, whose voices on the radio will make them hearthside visitors to millions of homes. All of these regular radio features will be continued during this summer, and with particular effort to make the summer programs of 1924 the best ever.

Increase in Power of Broadcasting Stations

COMPARED with last summer, there are now many more of the high-powered "Class B" broadcasting stations in operation all over the country, and certain of the principal stations have in addition greatly augmented the power used, so that the music and signals sent out by these stations "come in" much louder, making reception much better, particularly on occasional nights when "static" may be heard.

New Allocation of Wave-Lengths Now Effective

THE allocation of radio wave-lengths under the Hoover Conference plan will be fully effective this summer, whereas last summer the change-over was just being made, and some interference was still being experienced. This separation of broadcast wave-lengths gives each station practically a clear track and is making radio reception far more satisfactory than it was last summer.

"Code" interference has also been largely eliminated from the broadcasting wave-bands, avoiding disturbance from that source.

Radio Audience Has Doubled Since Last Summer

EACH radio set sold, it appears, automatically sells two more sets to friends of the first purchaser,—at least that is the conclusion to be drawn from the fact that radio-set sales are doubling each year. This also means that the radio audience this summer will be double that of last summer, with a corresponding more rapid growth of popular interest, and the desire on the part of many present owners to equip themselves with improved sets to receive the summer programs.

Re-Broadcasting Brings National Programs to Everyone

THIS will be the first summer that re-broadcasting from one station to another has been possible, bringing to radio listeners all over the continent the splendid programs and

famous speakers of great metropolitan centers. One chain of such re-broadcast stations is now in nightly operation, picking up Eastern programs, and re-distributing them, tremendously amplified, to all the states of the mid-west and Pacific Coast sections.

Sets Improved and Made Portable for Vacationers

OF THE vast radio audience which has been enjoying radio entertainment all winter long, there will be many who will insist on taking radio sets with them on their vacations to seashore, woods and mountains. New sets are now available of increased sensitiveness, and many of these sets are readily portable, with self-contained batteries, antennas, etc. There are radio enthusiasts everywhere who are ready to replace their present outfits with improved portable sets for vacation use.

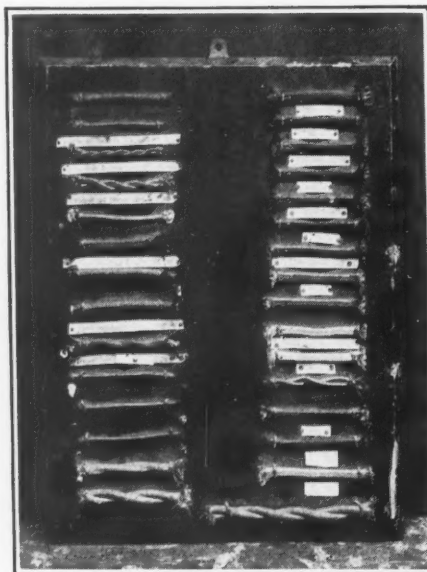
Radio Sets Not So Costly This Summer as Last

THE cost of owning a radio receiving set that would satisfy the average American home was estimated last year to be \$150. Present price schedules show an average of 25 per cent reduction to the public, even with marked improvements in performance. Vacuum tubes have been reduced in price, from \$6.50, in 1923, to \$5 in 1924. Excellent headsets and loud-speakers are now obtainable at lower prices. All of the foregoing reductions greatly widen the market for radio.

Popular Advertising in Magazines and Newspapers

GREAT campaigns of advertising in the national popular magazines and in local newspapers are now being planned by manufacturers and others, to stimulate interest in radio during the summer months. Attention will be called to the great news events, such as the national political conventions, the MacMillan polar expedition, the proposed airship flight across the Arctic, the presidential campaign, etc., all to be reported by radio, enabling owners of radio sets to be actual sharers in these stirring events. These ads will be appropriately timed and will create public attention on which the dealer can cash in.

This Price and Sample Board Saves Time and Prevents Errors



Here is an idea for a handy price and sample board for electrical cords. This piece of store equipment is easy to arrange. Samples, say four inches long, of each size, color and kind of cord carried in stock are attached to a suitable board. Prices are marked, as shown in the illustration, and the board posted conspicuously with the wire stock. Where this stock is carried in a back room, a duplicate board should be placed in the front part of the store to aid customers in selecting what they want. Where two boards are used each sample should be numbered. This plan saves time and prevents mistakes.



Fooled you, didn't it? No, this little building was never intended to hold automobiles. It was built and furnished at a cost of \$1,200 by a wiring contractor to shelter

electrical appliances. Now the contractor has become a full-fledged merchant with a thriving business. The structure is a 2-car steel garage type, furnished attractively.

Fitting Up an Attractive Electric Shop for Twelve Hundred Dollars

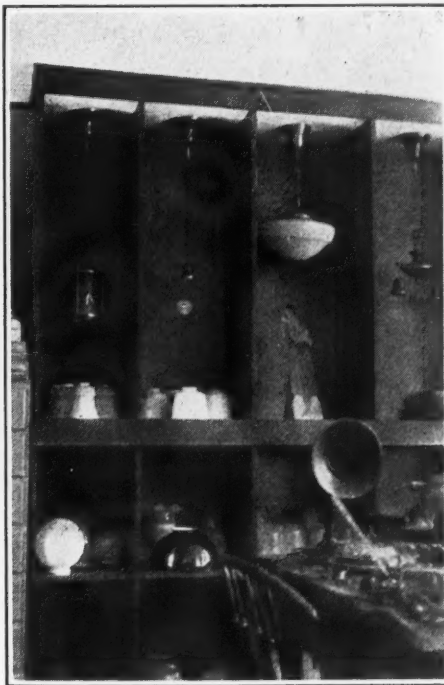
Wiring Contractor Tells How He Made a Store Out of a Small Garage

By HOWARD S. KNOWLTON

A REMARKABLY tasteful little electric shop was recently opened at 374 Harvard Street, Brookline, Mass., by A. E. Thomas, under the name of the Beacon Electric Company, in order to provide a convenient office for local wiring customers and to develop the sale of appliances. Mr. Thomas is a young man who has been in the house wiring business in Brookline for about seven years, but who lately went into business "on his own," maintaining an office in his residence. A representative of *Electrical Merchandising* passed Mr. Thomas' new shop at night recently and was so impressed with its effective outline lighting and general set-up that at the first opportunity a call was made to see the place at close range.

"To provide a suitable building without undue expense was quite a problem," said Mr. Thomas. "After thinking the matter over, the best way out seemed to be to put up a 2-car steel garage, one story in height, 18 feet square, lined with sheathrock and with the interior painted in a light green and the ceiling white. The cost of the building, with two plate glass windows at the front, was only \$600, and the concrete floor which we had put in was \$100 more. I did a lot of the work myself when it came to the inside finishing and carpentry for shelves, cabinets, etc., and of course took care

of all the wiring. The outside cost to me was probably under \$1,200, and I now have a place where my customers can come and do business in comfort and with convenience. During the first year we do not expect to do a large appliance business, but I plan to carry a high-grade line of radio apparatus shortly, and expect, with Mrs. Thomas' help, to



When building his shelves in his little shop, this contractor-dealer bore in mind the value of "setting off" the fixtures. Each recess is wired for outlets for demonstration purposes.

build up a nice little retail trade in this locality."

The interior of this little shop is charming, although it is so small that it is difficult to obtain photographs except of bits here and there. There are two fine show windows, each 32 in. deep and 6 ft. long. Three overhead outlets with 25-watt lamps illuminate each window, and the appliances displayed can be operated by flexible cord connections to a duplex plug at the middle rear. The plate glass fronts are five ft. sq.

The floor coverings are brownish colored mats which do not show dust easily. The central portion of the room is occupied by an appliance display table, with a counter and showcase at the left. Neat white cloth curtains cut off the window backs from the showroom, and the curtains are attached to bent brass rods which can easily be lifted to permit access to devices shown in the windows. About two-thirds of the way down the room from the entrance is a partition with a shelf or mantel 12 in. wide and four ft. above the floor, for the display of fixtures and appliances. Behind this is concealed a workbench for light repairs on appliances and a small coal stove which easily provides sufficient heat for the establishment. The ceiling is 7 ft. 10 in. high, and above is a storage space which is reached by a hatchway over the little repair shop. The color scheme is restful and pleasing.

"To simplify the display of fixtures," said Mr. Thomas, "I built the wall recesses on the right of the room. I did not want to use boxes in tiers, as is so often done, because of their cheap appearance. You can get a good idea of the way a fixture is going to look within these little recesses, which are wired to outlets for demonstration purposes. We keep all sorts of miscellaneous supplies in the cabinet of drawers on the left, and our lamp stock is carried on shelves which I built, as you see."

Mr. Thomas said that thus far he has done no newspaper advertising, but that the interest of his customers has been heightened by the opening of the store and that the outline lighting, with 28, 10-watt lamps has helped to create a place for the concern in neighborhood thought. A 75-watt lamp in a central glass bowl provides sufficient general illumination for the interior. About 30 interior outlets are provided for demonstration purposes.

Raising a \$400 Wiring Contract to \$3,500

Selling the Electrical Home Idea Increases Contract

The seeds of the electrical home idea have been widely spread through the various exhibits of electrical homes throughout the country. Occasionally these grow up to fine plants of themselves without further cultivation—and prospective home builders of their own initiative will ask for the full quota of electrical equipment in their new homes. More often, however, the result of this educational work does not appear in any such concrete way, but rather in a general receptive attitude which must be developed and cultivated by the electrical contractor and dealer—and only then after such personal attention, will develop into a "home electrical" installation.

R. E. Heerman, of the S&H Service Electric Company of Alhambra, Cal., can tell of one such instance where personal attention and salesmanship, following two Home Electric exhibits in Alhambra, transformed a home which was to be merely moderately equipped with electricity to one of the most completely electrified homes in the district. The house is that of B. D. Gillson and is located at Covina in a district not served with gas. The

original intention of the owner, in consequence, was to install a fuel oil plant for heating and cooking, lighting the house with electricity—and the order for furnace and other oil equipment had already been made.

In discussing the plans for electric wiring, however, Mr. Heerman became convinced that electricity was the better solution of the problem—and so convincing were his arguments to this effect, that Mr. Gillson cancelled his original order and instead has completely electrified his home.

Electric range and water heater serve the kitchen. An electric refrigerator preserves the food. Electric steam radiators heat the house in winter and electric fans keep it cool in summer. Electric appliances, of course, care for the needs of dining room, breakfast room and bedrooms—and the laundry is completely electrified.

By his initiative and good salesmanship, Mr. Heerman thus increased the installation from one which was to have cost \$400 to one which totaled \$3,500, much to the satisfaction of the owner himself, who is greatly pleased with the service he is receiving from his electrical home.



This attractive electrical home at Covina, Cal., would never have been an electrical home, if the contractor had not sold the idea to the owner after he had already planned for another type of installation. An instal-

lation which was to have cost \$400 was changed to \$3,500, as a result of the contractor's initiative and salesmanship. Note the electric steam radiator in the picture above.

Checking Up on the Budget

Every expert in the merchandising field is agreed that the making of a budget is a desirable thing. Too frequently, however, the budget is made at the beginning of the year and then forgotten until the end when the dealer discovers to his delight or horror that he has succeeded in living within it or otherwise.

The effective budget is the one which is itemized by months and with which the business is checked month by month. The importance of checking results and of keeping within a budget once set is emphasized by a bulletin recently sent out by the British Columbia Electrical Service League to its members.

The letter was as follows:

Budget Your Business

At the recent Convention Mr. Davis of the Association of Electragists, International, suggested that every contractor-dealer at the beginning of the year, prepare a budget of operations for the coming year.

This is certainly a wise policy but the contractor-dealer who prepares such a budget must remember one thing—volume of business obtained below the margin set in the budget leads to financial trouble.

The methods of preparing a business budget are various but the principle is basic. For example: assume your business for last year was \$40,000 in volume.

Overhead expense \$10,000 or 25 per cent
Net Profit 2,000 or 5 per cent

By raising the volume of business to \$50,000 you can reduce your overhead percentage to 20 per cent and still make 5 per cent net. This you decide to do for the coming year.

List your sales for the past year by month. Then prepare your sales budget for a \$50,000 gross volume.

| Past Year | | | Budget for New Year | | |
|-----------|----------|----------|---------------------|----------|----------|
| | | Per Cent | | Per Cent | |
| Jan.... | \$1,000 | 2½ | Jan.... | 2½ | \$1,250 |
| Feb.... | 1,200 | 3 | Feb.... | 3 | 1,500 |
| March.. | 1,500 | 3½ | March.. | 3½ | 1,875 |
| April.. | 2,000 | 5 | April.. | 5 | 2,500 |
| May.... | 3,000 | 7½ | May.... | 7 | 3,750 |
| June.... | 5,000 | 12½ | June.... | 12½ | 6,250 |
| July.... | 7,500 | 18½ | July.... | 18½ | 9,375 |
| Aug.... | 7,000 | 17½ | Aug.... | 17½ | 8,750 |
| Sept.... | 4,000 | 10 | Sept.... | 10 | 5,000 |
| Oct.... | 3,000 | 7½ | Oct.... | 7½ | 3,750 |
| Nov.... | 2,800 | 7 | Nov.... | 7 | 3,500 |
| Dec.... | 2,000 | 5 | Dec.... | 5 | 2,500 |
| Total | \$40,000 | 100 | | 100 | \$50,000 |

The right hand column is bogey for a \$50,000 business, but business to make this volume must carry a markup of 20 plus 5 or 25 per cent on selling price, which is obtained by marking up net cost by 33½ per cent.

When one month falls below the budget volume the contractor-dealer

—A Business Budget for the Contractor

must either increase his markup or go after new business on the basis of markup in the budget.

Every golf course has a par or bogey for the course—it is a mark to shoot at, in playing a game of golf; likewise every business should work on a budget basis, but the contractor-dealer who takes work on a margin less than that on which the budget is based, is like the golfer who makes a "good" score by forgetting to count all his strokes. He is lying to himself and to his friends. The contractor-dealer who takes work below his estimated overhead and profit lies to himself and to his creditors.

Plan carefully the volume of business you wish to do each month.

Watch and budget every item of overhead expense in advance, and stick to the program you have laid out.

Why One Should Keep Colored Lamps Clean

The assertion has often been made that colored lamps fade. This refers, of course, to "natural" and spray-colored lamps, as dipped ones will peel with long use.

Perhaps this question is asked most frequently with respect to the "daylight" and blue-bulb sign lamps because they are used in larger quantities than the others for sign lighting service. The coloring of these lamps is in the glass itself and can-

not change under ordinary burning conditions.

The Westinghouse Lamp Company has found it is true that some of the lamps appear to fade, and instead of the white sparkling light obtained when the lamps were first installed, the light appears yellow as though the lamp had faded. This is particularly noticeable where a sign has been lamped with blue sign lamps. Light from the renewal lamps appears much whiter and more brilliant than from those that have been in service for some time.

A thorough investigation that was made revealed that the apparent fading is due to dirt collecting on the lamps. Some 75-watt Mazda daylight lamps that had been in service for over two years were removed from signs. They were picked because they appeared particularly faded and yellow, but when they had been cleaned thoroughly, and lighted again, the original sparkle, color and brilliancy were restored. It was also found that the dirt was absorbing 44.5 per cent of the light, so there is a double advantage in keeping the lamps clean.

The question of fading lamps came up when some flame-tinted Mazda

lamps were returned for this reason. They really appeared faded, and until the lamps were cleaned and the original color restored, the manufacturers were almost convinced that the lamps had faded. The grease and dirt had counteracted the flame-tint effect. Especially is this grease deposit present in towns and cities where soft coal is generally used. The effect of grease on a frosted or flame-tinted Mazda lamp may be vividly demonstrated by placing a drop of oil on the lamp. It makes either kind of lamp appear like clear glass bulbs and readily explains why the color seems to fade. The coloring matter used in spray-colored lamps is similar to that used for coloring pottery, and is a mineral coloring which is absolutely fast to light and heat. The coloring of natural colored bulbs is in the glass itself and cannot fade.

Pave the Way for Summer Business—Now!

A timely service suggestion by a Bonham, Texas, firm, Smith-Jones Electric Company, reads:

"Better let us clean and oil that fan, summer is on the way."

How Electrical Men Disfigure Attractive Homes with Unsightly Overhead Service Wires



"Why is it that so little attention is paid to running the electric-light feed line into a residence? In the majority of cases, it unfortunately is made as conspicuous as possible," is the complaint lodged against electrical construction men by *Building Age*, a journal for builders. "The remedy is so easy and comparatively cheap in price, that the great wonder is that wires are not more often buried in the ground. For the feed line can be placed in the same trench as the water supply pipe, thus cutting down an additional expense item."

"The two pictures show typical examples of what may be found in even some of our select residential districts. These are not cheap houses by any means but their outside appearance has actually been spoiled—not by the idea of saving fifty dollars, but just simply by not thinking what can be done to get rid of such an eyesore."

"This problem of the electric feed wires should be directly handled by builders and they should insist that if any feed lines come overhead they should enter at the back rather than at the front or side."

"Builders can help and here is a suggestion offered by this builder's magazine to its builder readers."

"Build a pipe (a 1-inch galvanized iron will do) in the wall, if it is a masonry or stucco covered house and then your line-man will not have to drill through the wall—perhaps saving it from disfigurement. The feed wires will go there because you will have made a place for it."

"This little scheme works. It will save you much patching and grumbling from your electricians and from the owners, too."

Store Demonstrations When Sale Is Made Save Servicing Charges Afterward

Barker Brothers, of Los Angeles, Have Model Kitchen and Laundry,
thus Combining Advantages of Specialty Shop with Department Store

A WOMAN went into a dealer's store not long ago to make a small purchase. As she was about to leave, the salesman said to her:

"Did you ever use an electric washer?"

"Yes," she said, "and I don't think they're very practical."

"We have an electrical kitchen right here in the store," explained the salesman, "with an electric washer attached to the water system and"—

"I bought one once," interrupted the woman, "but it never worked to my satisfaction. The store from which I bought it kept sending people out to adjust it. When I bought it nobody explained clearly to me how it worked, so I finally sent it back."

Many people, especially women, have had similar experiences with electrical appliances. The reason for it is that the dealer oftentimes does

not take the trouble to demonstrate the use of the appliance at the time the sale is made; and one reason he does not is that he has no facilities within the store for showing the appliance in use. He prefers to wait until it is installed in the customer's home and then to send a man there to show her how to use it.

Don't Wait Until Appliance Is Delivered

This matter of thoroughly demonstrating the article in the store at the time of making the sale is one that is considered to be of great importance by Barker Brothers, of Los Angeles.

This store is a department store specializing in household goods. It does not carry clothing nor goods by the yard, but it does handle all lines of household equipment from china to pianos. An electrical department is an important feature of Barker

Brothers' business. It is not handled as a unit. The small appliances are made a sub-department under the main division of dining room and kitchen ware, and they are located on the main floor, easily accessible from the street. The heavy appliances are on one of the upper floors in a department by themselves. This is in charge of E. A. Norton, who has had many years' experience in all branches of the electrical industry on the Pacific Coast. It is conducted according to the best theories of electrical merchandising.

An effective part of Barker Brothers' sales service is a model kitchen and laundry, which is set up on the sales floor. It is open on two sides so the public may see everything going on. The invitation to enter is extended to everyone passing by, by reason of the attractive appearance of the white finished rooms and the appetizing odors emanating



A model kitchen and back porch completely outfitted with electrical equipment is part of the sales equipment used by Barker Bros.,

of Los Angeles, to sell the electrical idea. The demonstrations given here often save special trips to the customer's home and

thus reduce expenses of the service department. This display merely augments and does not displace regular sales departments.

from the range. The installation is complete, with range, water heater, dishwashing machine, electric steam radiator type of heater, mixing machine and electric refrigerator, in the kitchen. In the back porch are the washing machine, ironing machine and other laundry equipment. In addition the operating machinery of the refrigerator is displayed in such a way that it can be easily explained to the customer.

Convenience outlets are installed at a number of points. In fact, everything is at hand to demonstrate almost any domestic appliance under

the conditions in which it will be used. With the sink piped for running water, it is possible to show how quickly hot water can be obtained. Cooking is done in the stove, food is kept in the icebox and dishes are washed in the dishwashing machine, thus answering many of the questions usually asked by the prospective purchaser.

Besides attracting considerable attention and bringing in many inquiries from customers passing through this department, this installation has saved much explanation which would otherwise have to

be given in the customer's home. The store is prepared to furnish a demonstrator who will supply the necessary instructions as to the use of appliances when actually installed at the residence of the purchaser, but the explanation and demonstration given before the purchase is made, make this unnecessary in many cases and thus marks a distinct saving in the cost of servicing. The volume of electrical business handled by the store is very large and is constantly growing. The specialty shop within the department store combines the advantages of both establishments.

Promiscuous Granting of "Trade Discounts" Is Demoralizing Retailers' Business

New York Dealers Protest Indiscriminate Giving of "Trade Prices" to Laymen, and to Jobbers', Manufacturers' and Utility Companies' Employees and Their "Friends." Practice Works Hardship on Electrical Industry All Along the Line, and Injures Service to Public

AN ENERGETIC protest against the indiscriminate granting of "trade discounts" to the general public and to employees of electrical and utility concerns and their numerous "relatives" and "friends," has been registered by the electrical appliance retailers of New York City with the New York Electrical Board of Trade. The dealers declare that this evil of giving "trade prices" to anyone, has lately grown to such a magnitude in the greater city, that it now constitutes one of the chief barriers to any possible merchandising profit.

Dealers cite examples of having many calls every day for prices on appliances, only to be met with the reply by the customer, "Well, I have a friend with the ——— Company, and he gets a trade discount—thirty off—so I think I'll get it through him."

One enterprising contractor who opened up a store, found that all his friends and former contracting customers came in and wanted to buy washing machines and vacuum

cleaners at trade discounts, so that at the end of six months, while he had done a wonderful volume of business in appliances, so far as numbers went, scrutiny of his books showed that hardly a single sale had been made at the retail price. So insistent continued the demand on him for discounts by all those who came in, that this contractor closed up his store and now swears "Never again!"

Relatives, Friends and Friends' Friends All Prosper

In New York City alone there are some ten thousand employees of one utility who are granted "employees' prices" on all articles electrical, and by the time these ten thousand families are multiplied by those of "relatives," "friends," and "friends' friends," the result is felt as a big factor in demoralizing the metropolitan appliance market.

Improper giving of trade discounts to the general public not entitled to receive them, also works harm to other interests than those of the dealer and contractor. The public

itself is thereby being deprived of proper servicing of the appliances it buys, declare the dealers, because the large proportion of such devices sold to laymen at a "trade discount" pay no share of the retailer's expenses, and so the retailer cannot provide means to service them when trouble develops.

High-salaried executives of electrical companies—jobbers, manufacturers and utility companies—have their time taken up every day in arranging petty sales of appliances at trade prices through unaccustomed channels—all being sales which should be handled by \$20 clerks. Indeed, such "courtesy sales," when negotiated by executives, instead of cutting out retail selling costs in that particular transaction, actually cost the industry several times the ordinary retail distribution expense and so rob other legitimate distributing activities.

Improper trade discounts have already so demoralized the public's understanding of prices in electrical goods, it is declared, that, in many

appliance lines the "retail price" quoted by the manufacturer's popular advertising has become meaningless. To accomplish merchandising success, say certain New York dealers, wider spreads are not needed so much as it is to get dealers to collect in full the spreads assured them under present schedules, and to preserve the full volume of appliance sales through retail channels to help carry overhead. The co-operation of appliance manufacturers is therefore expected by the dealers in their present effort to eliminate the trade-discount evil.

Following is the resolution which has been presented by the Household Appliance Group to the Board of Governors of the New York Electrical Board of Trade:

Large Part of Retail Business Is Now Transacted at Wholesale Prices

"Preamble: Conditions exist in the distribution of electrical appliances which create hardship to the dealer and cause inferior service to the public. Corrective measures should be initiated toward the solution of the problem involved.

"The desirable type of individual and capital are not attracted to the retailing of electrical merchandise in the New York territory, as the local practices in merchandising prevent a fair return on the investment of capital and sales effort. Under such conditions, profits are inadequate and consequently credits are poor and the service to the public unsatisfactory. The discounts allowed by manufacturers may be generous but their purposes are defeated in that a large amount of retailing is transacted at wholesale prices.

"The indiscriminate offering of commercial and industrial discounts to firms and individuals not associated with the industry is general and action should be taken to limit such practices to those entitled to such discounts—which discounts in all cases should be less than the discounts offered to dealers.

"Makes Thousands of Salesmen Working to Destroy Retail Establishments"

"The practice exists of granting large discounts to employees by manufacturers, jobbers and public-service corporations, in many instances equal to the dealers' discounts and, in some cases, even greater. Thereby, thousands of salesmen are created working to the destruction of invested capital in electrical retail establishments.

"The large manufacturers, jobbers and distributors have failed to enforce corrective measures, which would create a more healthful condition, of benefit to the manufacturer and jobber as well as to the retailer. The Committee on Trade Relations of the Appliance Group has invited some of the largest distributors to take voluntary action

for the improvement of the aforementioned conditions. This invitation has not been met with the response and the spirit of co-operation necessary.

"Resolved: By the Household Appliance Group, consisting of distributors, dealers, contractor dealers and all concerned in the retail sale of electrical appliances, that the New York Electrical Board of Trade take cognizance of these conditions, of general knowledge, above stated, and that corrective measures be initiated for a more healthful condition of merchandising and for more efficient service to the public in this locality.

HOUSEHOLD APPLIANCE DEALERS
GROUP OF THE ELECTRICAL BOARD
OF TRADE OF NEW YORK

"Manufacturers complain generally that they are baffled by the local conditions of the New York market and that all merchandising plans fail to function in this locality," said Harry P. Disbecker, chairman of the New York City Household-Appliance Dealers Group, in an interview given to a representative of *Electrical Merchandising*. "We hear continual complaints from jobbers and dealers that this market is unprofitable and that the conditions existing do not enable them to conduct business at a profit.

"We must concede that the conditions are not as they should be. This is reflected in the poor credits of the majority of our electrical dealers and the failure of desirable individuals and capital to enter the electrical business.

Tells Why Electrical Industry Is Different

"Now just why does this condition exist and why should such conditions be peculiar to the electrical industry, whereas other industries appear to be in a far more satisfactory condition?

"In the first place," continued Mr. Disbecker, "the electrical industry is young comparatively—and manufacturing and distribution has been developed to a high degree in a short space of time.

"It is unfortunate that the merchandising part of the business has not grown in the same ratio of efficiency, resulting in a desire to hurl large quantities of merchandise on a market which has not been properly organized, in so far as sound merchandising principles require.

"If the large electrical manufacturers would pause and thoroughly analyze this situation, they would appreciate the fact that distribution could be made at a better profit to

all concerned, and especially to the manufacturer, if, instead of continually increasing volume of output, economy in the present distribution was effected.

"We have high-powered executives in this locality, representing the very large electrical manufacturing interests, who continually and persistently hammer the market in order to create an increased distribution of merchandise, irrespective of the manner in which such merchandise is absorbed.

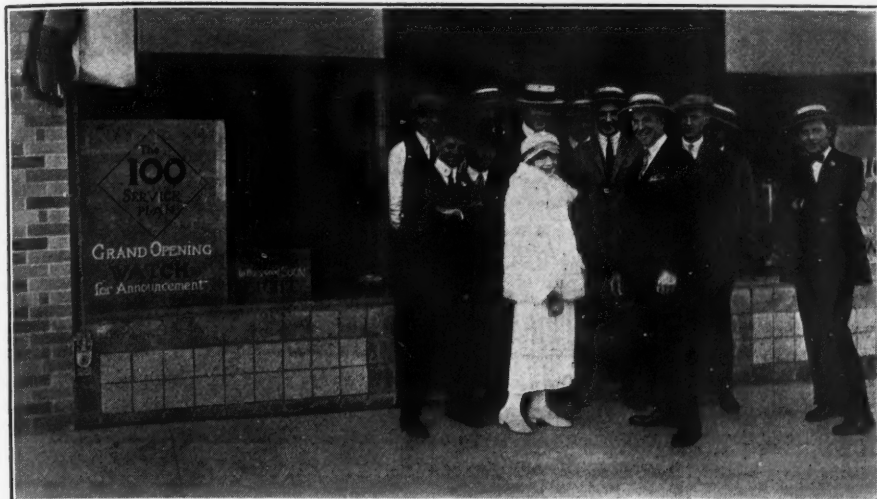
Dealer Cannot Pay Overhead If He Doesn't Realize Full Margin

"Differentials are allowed the dealer trade which are presumed to give them a margin covering overhead and a small profit. But," said Mr. Disbecker, "unless the dealer actually realizes this margin he will not be in a position to afford his overhead and pay his bills. These differentials are not being realized by the dealer in view of the existing conditions, which include continual sacrifice of differentials in competition, industrial discounts indiscriminately offered by jobbers, and the creation of thousands of competing salesmen against the dealer trade, by the allowance of discounts to employees by the large local electrical corporations, which equal and even exceed the discounts given to dealers.

"There will never be better credits and a more healthful condition of business until the dealer is compelled to receive his differential and to be protected against himself. We certainly cannot assume that the electrical industry is so peculiar and so different from other industries that this cannot be accomplished. We must therefore assume, as stated above, that this phase has been neglected and all energies devoted to production and the unloading of goods on the market.

"Again we say that the big interests must pause and immediately take up the conditions of merchandising. They must promptly put under way measures for the improvement of local conditions which will enable the dealer to function in a manner which will be of moderate profit to himself and will enable him to give satisfactory service to the buying public.

"Until such measures are undertaken," declared Chairman Disbecker, "bad credits will continue to exist and the electrical retail trade will remain in the chaotic condition in which we find it at the present time."



The opening of the "One Hundred Service Men's" store was attended by quite a delegation of screen stars—a fact which helped to bring others to the celebration. In this picture which presents members of the 100

Service Plan, Miss Helen Ferguson occupies the foreground, together with John W. Hamilton, president of the board of directors. The opening, a community event, was preceded by a parade in Hollywood.

With "Service" as the Watchword

World-War Veterans Open Electrical Store in Los Angeles

WITH "Service" as a watchword, one hundred ex-service men of Los Angeles, have pooled their finances and opened an electrical shop on Hollywood Boulevard, known as "The 100 Service Plan." There has been much talk of helping the veterans of the world war by teaching them vocations, or by giving them preference in securing positions in the business field,—but these hundred boys, over ninety per cent of whom were wounded or otherwise disabled in the service, have taken matters into their own hands and are answering their own problem.

There is no idea among them of "trading" on their war records; they have set out to build a business on the principles of loyalty and service, utilizing their own capital and the same spirit of co-operation and determination with which they helped to put through the little matter of the war.

The business starts as a corporation with a \$50,000 capital, and with, back of it, the personal standing in the community and the credit stability of these hundred service men. The business is primarily an electrical retail business at the present time, with a store manager whose ideal is to conduct it along standard merchandising lines. At the same time the corporation handles whatever contracting business it can with its present facilities. Later

this contracting service is to be extended.

The symbol of a boy in an overseas cap against the background of an orange circle, has been adopted and is used on stationery, bill heads and business cards. The cards themselves are unique, being printed on a heavy rough finished book paper and folded over, with the trademark and the store address on the upper flap. On the inner side, but showing below the fold, which does not reach the bottom of the card, is the name of the representative of the store. The recipient of this document is impelled at once to open up the little folder. Inside appears the motto of the store:

Service—is the rock on which the 100 service plan is founded—service rendered in a new spirit by men who know what the fullest measure of service means. Despite the fact that over 90 per cent of the 100 men are disabled, their service is not offered on this basis. They are entering the business field on their business ability alone—asking not for sympathy or special favors, but merely your patronage which they will merit by unusual service.

The name below is preceded by the phrase, "one of the 100."

The store is attractive in appearance both without and within. A full stock of household equipment is carried and the latest ideas in store arrangement are utilized in its display.

The opening of the store was made a community event. It was preceded

by a parade through the business section of Hollywood. Then followed a reception and general "open house" to which friends and well wishers were invited. The feature had been given particular publicity in the press for some time preceding and a large gathering resulted. Miss Helen Ferguson, assisted by Pat O'Malley, featured in Reginald Barker's version of "The Virginian," Philippe de Lacy, the French war orphan who is under the protection of Mary Pickford, Coy Watson, the young ten year old film favorite and other prominent members of Hollywood's colony of the screen, were present.

The business is under the direction of an elected board of directors of which John W. Hamilton is president. The practical management of the retail department is in the hands of A. S. Butterworth, Jr., while the contracting department is supervised by J. E. Glenn, who has had many years of experience in the contracting field in that section. The firm is represented in the local association of electrical contractors and dealers, and aims to co-operate with the others in the field in every possible way.

Courage to Get the Price

It takes backbone sometimes to get a price that will leave a fair margin of profit. By arguments familiar to every dealer a customer will try to get a discount. Finally he plays his last card. He starts to leave the store. At this point many a dealer will glance hastily at the price mark. He sees in cipher his cost—say \$1. His selling price is \$1.50. The gross profit is 50 cents, which looks liberal.

"All right," the dealer says, "Give me \$1.25 and take it along."

Now if this merchant was an electrical dealer, he lost money on that sale. The average percentage of overhead in typical electrical stores is 26.4 per cent. In other words, figuring on the basis of the selling price, it costs 36 cents to sell every dollar's worth of goods in such stores. So that in practice the actual cost of that article to the dealer was \$1.36.

It is just plain business sense then to mark the goods not at the purchase price but at the total cost as we have indicated. The difference between this cost proper and the selling would be the net profit. With his figures thus graphically before him, the progressive dealer would seldom yield to the temptation to sell for less than he could afford.

Window-Display Ideas That Ring U

Here Are Ideas Which Any Dealer Can Adopt and Put to Work in His Own Store Windows—in Most Cases, with a Minimum of Outlay and Preparation

Get a Clothing Store to Put On a Washer Window

Here is a plan to advertise electric clothes washers which will appeal to some local clothing or dry goods dealer, because it will help him as well as the electrical dealer. It was successfully tried out in San Francisco.

At the suggestion of an electrical dealer, one of the leading men's furnishing goods stores placed a clothes washer in its best window to advertise a certain brand of soft collars to be washed for 90 hours. The washer was in operation only during working hours. On one side of the washer stood a board showing the latest types in soft collars before washing. On the other side was a blank board with a card stating that the collars in the clothes washer would be placed in this space after the 90-hour test, which was to prove the good quality of the collars.

On and around the clothes washer

were window cards describing it, and mentioning that it was loaned by the Blank Electric Company. The window had crowds around it during the entire demonstration.

A "Hen and Chicks" Idea for Your Easter Window

Daintiness and simplicity should be the keynote of the Easter Week window display—and these are easily achieved with the aid of white and green crepe paper, white satin ribbon, white streamers, and potted daffodils, hyacinths or Easter lillies. Something more elaborate is suggested in the window shown on this page—the large papier-mache iron and little irons being an electrical variation of the mother hen and little chicks theme. Well-handled—perhaps with the central iron group surrounded by little families of yellow chicks on a crepe-paper green field—this theme offers possibilities for an interesting Easter window.

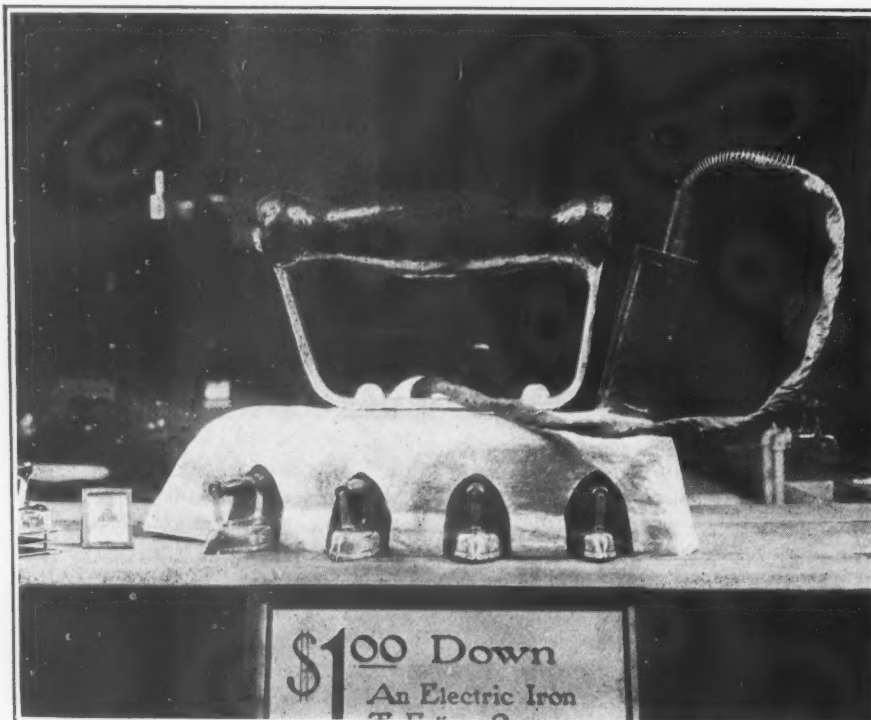
An Easy Method of Making Window Posters

Attractive show cards and posters for use in window displays can be made by utilizing cover designs and advertisements in magazines, or pictures in Sunday supplements. Almost any school bulletin board, public library, or Y. W. C. A. will show examples of this sort of poster work. As a rule these posters are crude, but, given the idea, a liberal supply of good quality pasteboard stock of various colors, a pile of magazines, a pair of scissors and a paste-pot, a person possessing a little artistic ability should be able to produce very attractive posters on which prices or advertising messages may be stenciled or hand-lettered.

A young woman in a Southern store uses with great success this method of creating posters. Sometimes when she finds illustrations which are only partly suitable for her purpose she cuts out the sections not wanted and fills in a design of her own with paints or ink.

"Above All Other Makes"

The Wagner Electric Company, Memphis, Tenn., emphasized the supremacy of a certain well-known make of vacuum cleaner in an appropriate manner. The background was a pretty scenic effect of purple tinted, snow-capped mountains, which was painted on heavy cardboard. Concealed lights in a well-blended color lighting scheme produced a beautiful sunset effect that illuminated the entire show window. From the highest mountain peak floated a small flag, with the inscription, "Over All." A small airplane hung from the ceiling and revolved in a small circle. Uneven mounds, covered with seasonable foliage, were scattered about the floor at the rear, with small imitation trees planted here and there. Down in front were two of the vacuum cleaners, backed up by the following effective signs: "250,000 housewives recommend the Blank." "Health for the Kiddies."



With Easter not far off, a novel and attractive window display is suggested by this "hen and chicks" theme applied to the subject of electric irons. The window shown was one devised and executed by the New

York Edison Company, New York City, and the giant iron displayed was constructed of papier-mache. The same idea might be carried out with a large "cut-out" of an iron, made of cardboard or wall board.

Up Sales on the Cash Register

Appliance Show-Window Suggestions Gathered from the Experience of Electric Shops and Contractor-Dealers' Stores in All Parts of the Country

An Animated Vacuum Cleaner Display

The J. C. English Company, Portland, Ore., recently arranged an animated vacuum-cleaner display as follows: A number of vacuum cleaners were placed about the window, but the center of attraction was a red toy balloon, crossed by strings on top, the strings coming down the sides of the balloon and being thence attached to a small wicker basket, in which were two small dolls. The balloon moved about the window in a perfectly natural manner, the animation being produced by a vacuum cleaner, the bag of which was removed, causing suction through the tube, which was attached to the cleaner in an upward position.

The Clown's Antics

The Vital Vacuum Company, Atlantic City, N. J., put over an unusual window demonstration when passers-by were attracted by the funny actions of a man dressed as a clown, who was scattering confetti about the window floor. As fast as he scattered the confetti about the floor, the vacuum cleaner which he manipulated cleaned up the mess. The various parts of a vacuum cleaner were exhibited on the floor at each side, while the background—a painted one—of a country setting, showed an old witch riding astride a vacuum cleaner above the tree tops. A sign proclaimed, "A vacuum cleaner—the modern witch. The Blank cleaner replaced the Broom."

Washing Real Currency in the Window

Herpolsheimer's, Grand Rapids, Mich., brought home in a convincing manner that the electrical washer does not damage delicate fabrics. By arrangement with a local bank, twelve thousand dollars worth of soiled currency was secured for the purpose of a window demonstration.

The bills, which were of different denominations, were washed in the window by a skilled demonstrator, in full view of the public. Crowds were attracted to the window by the novel demonstration, and police protection had to be provided to look after the money and keep the crowds moving on the sidewalk.

"Do You Sentence Your Wife to Three Months in Jail Each Year?"

It's nothing less than brutal, the way the window display on this page puts the whole question of electrical labor-savers up to the poor, defenseless husband. And yet it's nothing less than brutal, either, the way many wives are forced to undergo three months' slavery over a washboard every year. As this window display

graphically shows, the husband who permits his wife to slave over a washboard is actually keeping her "in jail" three months a year—counting extra washings. The matter is put squarely up to him. Think it over—and use the idea in a window display of your own.

The Doll's Clothes Line

The "family clothes line" in an electrical washer display is not exactly a new idea, but it was left to Dulin and Martin, Washington, D. C., to give a new twist to it. Directly in front of the electrical washer on display a small clothes line was erected with the assistance of up-to-date posts and hooks. Hanging on this line was a doll's rug, a pair of doll house curtains, a small sheet, a tiny silk nightgown and a pair of tiny silk stockings.



On the placard in the upper part of the window appeared the following legend: "If I had taken advantage of electric clothes washers and other electrical appliances, I too would have kept my youth and beauty"—the plaint of the poor hard-working

drudge behind the bars at the old wash board. And on the placard at the bottom of the cell door were the words: "With this method you sentence your wife to three months' imprisonment each year. How long is she in for?—Husband, you hold the key!"

Making Sure of Your Money

Systematic Collection Methods Will Eliminate Defaulted Payments. How Losses Eat Into Profits. Get System Started When Contract Is Closed

By FRANK FARRINGTON

WHEN you install electrical equipment or carry out a wiring contract and fail to get paid for the work, you lose the profit on that job. But that is not all. You lose the money you have put into the job in wages and material, and that loss takes the profit off of several other jobs. If you figure on netting a profit of 10 per cent on a contract, to fail to get any money for that contract means *the loss of the profits on nine other contracts* of similar amount. To fail to get more than half the money means the loss of the profit on that job and four others like it.

The electrical contractor who is not a good collector will lose a good deal of money by unpaid accounts, or accounts only partly paid. He may easily lose in that way all the net profit of the year's business.

A man who is always short of money is likely to be a good collector because he always needs the money—or it may be that he is short of money just because he is a poor collector. Anyway shortage of working capital and failure in making collections are likely to be related to one another. Sometimes the way it works is that the man who has grown to be successful and has reached a point where he has plenty of funds becomes careless about making sure of his money, and the result is frequent losses and shrink-

age of profits. This is a common occurrence.

The time to begin getting the money is when you take the contract. Not that you are necessarily going to ask for a cash payment on signing the contract, but that you are going to see that the contract is binding upon a responsible party. Begin by insisting upon a statement of resources, of financial responsibility, from the man for whom you do the work, unless the job is one of slight financial importance.

No Contract Without Statement

A successful contractor told me the other day that he will accept no wiring contract or other contract of importance without first having a statement from the customer as to his financial ability. "You don't demand that from men who are personal friends or acquaintances and with whose affairs you are familiar, do you?" I asked him. "I demand it from everybody," he replied. "It is my rule. If a man doesn't want to make a statement, I suspect him of having something to conceal and I don't want his business. If a man has nothing to conceal, there is no reason why he should object to giving me the facts about his ability to pay."

That sounds reasonable, doesn't it? If a man can't or won't give you the facts about his ability to pay you, there is something he doesn't

want to tell. What a man doesn't want to tell is probably something you ought to know.

You want to know who owns the property on which you are to do work, because the work you do, the materials you supply, will become a part of that property, a part of the realty by the law of some states, and you cannot get back the material by a process of replevin, even though not paid for, and to some extent redeemable.

You want to know how much available money a man has for the job in question, what payments he will be able to make and when. You want to know what claims are outstanding against him and his property, claims that might have precedence over any claim of yours. It is a pretty good rule to get a statement, and if you make it a rule applicable to all alike, no one can justly take offense.

Then you need to have a written contract for anything more than a small job. When you get the whole agreement in writing you prevent future misunderstandings and disagreements. You know just what you are expected to do and how and when. You know when to expect payment, and if the contract is a large one, it ought to specify payments at intervals to cover labor and material as you go along, helping to finance the operation. Try to arrange for certain amounts to be paid at certain stages of the work. Then see that these payments are surely made when due. Money due you is yours by rights and you need not feel embarrassed at asking for your own.

Collect partial payments and final payment when due and if the money is not forthcoming, at least get settlement in the form of negotiable paper. Get something that will be a valid claim. And in completing the drawing of the contract be sure to have it stipulate that when the work has to be discontinued for certain



The successful contractor does not accept a contract without a statement of financial resources from the customer. If a man has nothing to conceal, there is no reason why

he should object to giving the facts about his ability to pay. If he won't give the facts there is something he doesn't want to tell.

specific unavoidable causes, such as strikes or failure of transportation facilities, etc., you are to be paid for what has been done to date.

The "Trade Acceptance" is a useful means of getting the buyer's account into definite, concrete form, so that it can be used at the bank. The Trade Acceptance is nothing more than a signed acknowledgment by your customer that the services mentioned have been rendered, that the materials and supplies as stated have been put into his possession, that the sum due you is acknowledged to be due and payable at a certain date.

The Trade Acceptance does not add to the validity of the account, but it makes it more easily collectible. It reduces it to a promise to pay and since it is placed in the bank where it becomes paper due on a certain date, the customer who might put you off with promises and postpone indefinitely the paying of his account, will be placed under an obligation he will accept, that of taking care of his paper in the bank.

Here is a Trade Acceptance form that has found favor with many contractors.

LABOR AND MATERIAL ACCEPTANCE
 No. City State
 Date 192..... \$
 after date pay to the order of ourselves
 Dollars as per
 labor and material contract.....
 The obligation of the acceptor hereof
 arises out of the purchase of labor and
 material from the drawer. This bill may
 be accepted as payable by the drawee at
 any bank, banker or trust company that
 he may designate.
 To
 (Name of drawee)
 (Signature of drawer)
 Per

 (Street address)
 City State
 Due 192.....
 (Date)
 Across this form is printed in red a blank
 form as follows:
 Date 192..
 Payable at
 (Address)
 (Signature of acceptor)
 Per

The use of a regular printed form for this transaction and for the purpose of getting a credit report from a customer makes it easier because the customer then sees that it is a matter of regular practice with you, not an exception in his case.

It should be easily understandable that to reduce an account to a single documentary promise to pay at a certain time, negotiable form of paper, will be a great advantage over carrying an open book account.

The contractor is less likely to be careless about making his money safe and certain in the case of the big jobs than in smaller operations. The loss of money on a large contract might result in serious financial difficulties. We give less heed to the smaller deals.

To lose the whole sum on a thousand dollar contract is a serious matter. Any contractor will take measures to prevent such a loss. But the possibility of loss on a \$100 job does not cause alarm and we are often careless about securing ourselves in such jobs as the latter. And yet, on a basis of 10 per cent net profit on jobs, the loss of the payment for the \$100 job might easily mean absorption right there of the

be there on that date. Get another promise if you cannot get all or a part of the money. By being there you get something—money or a promise or both. If another date is set, be there again at that time. Follow the debtor right up. The money is yours, you know.

Early action with slow pay people gets results. It is something to have a reputation for being an insistent collector and you get the credit for being a better business man on that account. The good collector is paid more promptly just because he is a good collector. People don't expect unlimited credit from him. Poor pay prospects do not try to buy from him.

Little accounts ought to receive attention, if only because they represent the profits on larger ones. Don't fail to send a bill just because the amount is small. If you neglect it, some day you have to send it and the customer is disgruntled because he has thought he was squared up with you. Don't forget that plenty of people are just as anxious to keep their account paid as you are to have them do so. I have seen men lose the patronage of some of the best trade because of being negligent in sending out bills.

Persistent personal effort will collect most of the delinquent accounts. Some people who neglect statements and letters entirely will pay up when dunned in person. It is easy to throw a bill or letter into the waste basket, but it is not so easy to look the man you owe right in the eyes and refuse to pay or to do anything about the account.

There are some people who seem seriously to follow the plan of the man in the joke who wrote his creditor in reply to an indignant letter demanding payment: "Dear sir—My bills are all paid by a regular system. I put them into a basket as they come in and each week I shut my eyes and draw out two bills and pay them. If I receive any more such letters from you, your bill will not even be put into the basket."

Indignant, angry, threatening letters accomplish very little. The only time to threaten is when courteous methods fail. Then threaten to act, and if the threat brings no results, act! Don't bluff!



It is an easy matter to throw a bill or letter into the waste basket, but it is not so easy to look the man you owe right in the eyes and refuse to pay or to do anything about the account.

net profit on the \$1,000 contract. There goes practically all the net return on \$1,100 worth of business.

It is bad enough to take a contract at so close a price that it brings in no net return, but the effects are much farther reaching when the whole price of a job, even a small one, is lost.

Collect Accounts on Time

The collection of accounts on your books must be pushed strenuously. Always mail statements on the first of the month, no matter how short a time the account has been on the books. Make it your rule and see that people know it and expect it.

When an account is due, go after the money. The usual first step is to send a bill or a statement, but better yet is a personal call right at the outset. Where there is any doubt about the customer's intention to pay promptly, it is better to see him and get a statement as to what he expects to do. When a man says he will pay on a certain date,

In February Issue of "Electrical Merchandising" Appeared Figures on Electrical Merchandise Sales and Market Possibilities

Do You Find Electrical Sales Statistics Helpful?

Shall We Go On Compiling These Estimates,
or Discontinue Them Next Year?

IN THE February, 1924, issue of *Electrical Merchandising*, as in previous years, we published very carefully compiled estimates and statistics on electrical merchandise production and markets. This survey, we hope, has been received by our readers and the industry generally as performing a useful service in pointing the tremendous opportunities for electrical merchandise sales.

We would like to get the personal opinion of our readers in all branches of the industry, as to the desirability of continuing such compilations from year to year,—to picture the growth of the business and to afford the retailer a measuring stick of his own efficiency.

Such compilations are, of course, costly, and unless the industry expresses itself that figures like these render a useful service to all groups, we shall not feel justified in continuing this survey next year, although obviously these figures become increasingly valuable as the compilation is carried on from year to year.

Since the appearance of the statistical information in the February issue, we have received a number of very helpful and constructive comments on these statistics,—several correspondents questioning the advisability of releasing such information, but hundreds enthusiastically urging that we continue the service next year.

Excerpts from some of these letters are given below.

What do you think, Mr. Reader? Your opinion is invited. Please address

Editor *Electrical Merchandising*,
Tenth Avenue & Thirty-sixth Street,
New York City.

From Manufacturers Who Object—

"We protest against the publishing of articles of this character, which so far as we can see do no one any

good, and simply attract to the field a lot of wildcat manufacturers of questionable goods, who during their brief adventure into the field do the industry a great deal of harm, increasing the difficulties of the standard manufacturers of standard merchandise, who are obliged to operate under a greater selling expense. We sincerely trust that the practice may be discontinued."

"I can conceive of no possible good to anyone to be accomplished by the publication of these figures. The only result will probably be the encouragement of a lot of fly-by-night manufacturers to enter a field which has now more competition than the volume of business will justify."

From Three Nationally-known Central Station Men—

"In my opinion your statistics render a valuable service to the electrical industry. I think this service should be continued to *Electrical Merchandising's* readers."

"You are doing a most valuable work for the industry, and one that is well worth maintaining and enlarging. The electrical industry should feel indebted to you for this service."

"I believe the information you provide to be of the utmost value to every branch of the industry, and hope it will be continued."

From Jobbers and Dealers—

"The statistics as published are of much interest and of real value to the electrical industry."

"Keep on with those statistics! More power to you!"

"Your statistics ought to be very educational and valuable to the trade in general * * in promoting sales."

"The importance of the electrical industry and the need for hard work are both registered in an effective and striking manner by your statistics."

From Manufacturers Who Approve—

"We can't see why anyone would object to any information which shows him his own opportunity."

"Your statistics help the manufacturer as well as the dealer to analyze his market better."

"Your Statistical Issue is of the utmost value to the electrical industry."

"You are giving information of inestimable value."

"Comparative analysis of our past records is the only true way in which we can chart our future."

"Helps Every Dealer to Realize Possibilities of Own Trade Territory"

"Your data is wonderfully useful. More power to you! That is great stuff. It should help every electrical dealer to realize the possibilities in his trade territory."

"We believe you are performing a real service by putting this information before the manufacturers, jobbers and dealers. We highly endorse the plan, and hope that you will find it possible to continue your present policy."

"Your statistics are very valuable and interesting."

"Anything of an educational nature is good for the industry."

"We think so well of the plan and of the statistics that we have borrowed some of the figures for use in our own catalog. You, of course, will be given proper credit."

"No Other Place to Go for Such Statistics"

"This work on the part of *Electrical Merchandising* is obviously valuable. I do not know of any other place where we can look for such reliable statistics, and I assure you that this material is constantly used."

"I feel that this is a constructive piece of work which is not likely to be done by anyone but your own good company. You might be interested to know that we availed ourselves of this information at our recent directors' meeting and that we feel it to be a constructive piece of work."

"We hope you will continue compiling and publishing this information."

"By all means continue this service—it is needed."

"I want to assure you that we consider the information published by your company on the subject of electrical merchandise production and markets, to be of extreme value to our sales organization. We sincerely trust that you will continue to give your readers the benefit of such information in the future."

"Your figures on industrial power customers have given me an interesting check on our sales quota for 1924."

"These statistics should be of great value in sales work."

"Emphatically, you should continue the statistics. They are very valuable to us."

"Good work. Your statistics give us an idea of what to shoot at."

"If you discontinued your valuable statistics on household appliances, we would have Senator Walsh investigate you! The statistics are very, very helpful."

"The industry appears dependent on your publication for its statistics."

"Your Statistics Are an Inspiration to Us Manufacturers"

"Your statistics not only give a remarkably clear picture of the electrical appliance market, but constitute an inspiration to us manufacturers."

"We purchased 36 copies of your February issue so that all our sales force would have personal copies."

"Reliable statistics are the guide posts in business."

"Your statistics are valuable and well set up. Please send me a dozen copies."

"Such information is extremely valuable to any live appliance manufacturer."

Weighing the Dirt

Knowels Furniture Store, Dundas, Ont., Can., recently conducted an interesting demonstration in conjunction with a vacuum cleaner demonstration. The window devoted to the subject contained several types of vacuum cleaners, with parts of the cleaners, backed up by explanatory cards, at the sides. The demonstration consisted of a rug that was spread across the sidewalk outside the store for several days. This rug was removed each night, the dust being removed from it by vacuum

cleaner and the dust weighed. This dust was deposited in a jar and then exhibited in the middle of the show window.

What Sometimes Happens to Business Men Who Lose Control of Their Feelings

BY ELTON J. BUCKLEY

Attorney-at-Law, Philadelphia

All business men, particularly those who sell goods, ought to be constantly on their guard against acts or expressions which will reflect upon the honesty of people with whom they have dealings. Such things open the way to damage actions, either for slander, or malicious prosecution, or something like that, which often proves expensive. The other day I sat in a business office with several other persons. The head of the concern was in very heated argument with a customer who had just gone into bankruptcy. The argument was over this customer's last bill, which he had bought less than a month before. The seller was very wroth about it, arguing that the

buyer must have known his condition then, and had no business to buy anything at all.

"I understand it," he said, "you had no intention of paying me when you bought those goods. You deliberately planned to get while the getting was good. You knew you were going into bankruptcy when you gave us that order, and made up your mind to sting us."

That was sheer slander, unless there was proof of it, and the debtor could have gone out, gotten any one of fifty attorneys of a certain class who would have been glad to take the case on a contingent fee, and bring suit for damages for slander. Of course, the jobber in this case couldn't have proved what he charged. It may have been true, but obviously he couldn't have proved it. Therefore it is by no means improbable that a verdict would have been rendered against him.

Not very long ago two women went into a grocery store. They bought two articles, neither of them meat, paid the cashier and left. Before they had got far, the manager rushed after them, accused them of having gotten meat without paying for it, took one of them by the shoulder and made both women return to the store. It seems that just as these women were leaving, the meat salesman had reported to the manager that somebody had gotten meat without paying and the manager jumped at the conclusion that the two women were the ones. When he brought them back to the store the meat salesman said they weren't the ones. That little break resulted in a substantial verdict against the owner of the store.

In another case two women went into a restaurant, an elderly woman and her niece. Both sat down at a table, and the niece ordered a meal. The aunt, however, wasn't hungry and ordered nothing. They finished, and the niece paid her check and was leaving when the cashier called her back and said her check paid for only one. She explained that only one had eaten, but he refused to accept this explanation and forcibly detained both women twenty or thirty minutes in deep mortification. Here, too, both women sued and got verdicts.

The comeback, when a thing like this is done or said, is so quick and easy that it doesn't pay to let your feelings go even in the clearest case, never without first consulting an attorney.

Tell Your Newspaper Editor About Your Latest Wiring Job



Many electrical men hesitate to send stories to their local newspapers because they are in doubt whether the editor would consider them news or not. One thing that is practically always "news," however, is the wiring or lighting of a church, school, bank, municipal hall or any other building well known in the community. When you wire one of these buildings, send a story about it to your local newspaper. That is what John S. Dolson of Keyport, N. J., did when he wired a new bank, and above is reproduced the neat little story given it by the local paper.

Systematizing the Store—Methods

How to Stop Retail Losses

BY ERNEST LARNED PRATT

There is an old saying that if one "saves the pennies the dollars will look out for themselves." This can well be paraphrased as follows to apply to all business: "Stop the losses and the profits will look out for themselves."

Investigation in various lines of business reveals that there are 34 separate and distinct kinds of losses. Many or all of them occur in the electrical and radio business every day. Every one can be prevented. Here they are:

1. *Forgotten transactions*, resulting in:
2. The loss of the cost of the goods.
3. The loss of the profit that should have been made.
4. The loss of time taken to make the sale.
5. The loss of labor handling the goods.
6. The loss of time tracing the loss.
7. *Disputed accounts*, resulting in:
8. Loss of the profit to which the dealer is entitled.
9. Loss of the customer's trade or good will.
10. Loss of the trade of the customer's friends.
11. *Dishonesty*, resulting in:
12. Loss of actual costs and profits.

13. Loss of loyalty.
14. Loss of ambition.
15. Loss of carefulness.
16. Loss of dealer's ability to control his business.
17. *Errors in posting*, resulting in:
18. Loss of customer's confidence.
19. Loss of dealer's power to analyze his business.
20. *Errors in delivery*, resulting in:
21. Loss of goods wrongly delivered.
22. Loss of customer who failed to get goods.
23. *Over-stocking*, resulting in:
24. Loss of profits that would have been made by conservative buying.
25. Loss due to depreciation of stock.
26. *C. O. D. charges*, resulting in:
27. Loss due to failure to credit cash returns properly.
28. Loss due to dishonesty made possible by carelessness.
29. *Exchanges*, resulting in:
30. Loss due to failure to record return of goods and acceptance of other merchandise.
31. Loss due to "faking" exchanges with help of disloyal employees.
32. *Refunds*, resulting in:
33. Loss due to dishonest customers.
34. Loss due to cashier paying without proper proof.

Losses such as I have recorded are costing American merchants millions of dollars every year, yet all of them can be prevented by recording sales and purchases as soon as they are made.

More and more business, no matter how big the establishment, is swinging to the practical method of making, in every transaction, a written record for every person taking part in that transaction. This evolution is not new. It began 40 years ago with the creation of the first retail sales books. But it has gone farther than was ever expected.

Hundreds of millions of sales slips are now being written every year. It is not too much to say that written records have made possible the present colossal development of business.

Sales slips stop the losses due to forgotten transactions, due to disputed accounts, due to errors in posting, due to errors in delivery, due to C. O. D. charges, due to exchanges, due to refunds. Buying records eliminate the losses due to over-stocking. Selling and buying records co-ordinated into one system according to the conditions surrounding each business stop 34 retail losses and make possible accurate control, management and analysis.

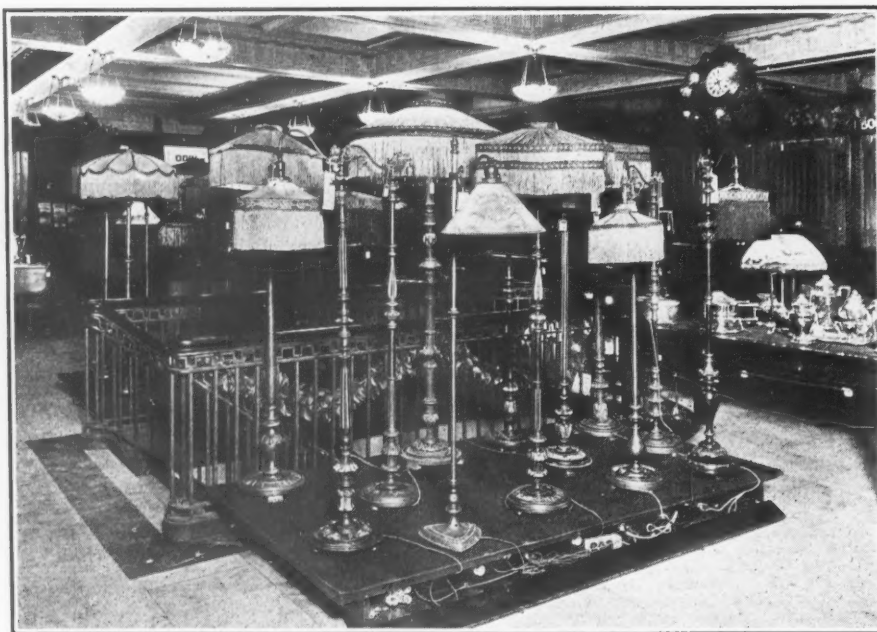
Why Waste the Wrapping Paper?

It is said that no advertising man ever looks at a sheet of blank paper without thinking of the waste of a good space which might have contained effective advertising. He would in that case have nothing to complain of in the practice of Clarence A. Son of San Francisco, who has taken advantage of the blank space on the wrapping paper used by his firm to print an advertisement of Mazda lamps. The picture itself is that of a small boy dashing past a policeman in order to purchase lamps, with the caption below it, "Hey, son, what's your hurry?"

The wrapping paper is cut to the size 12 in. by 18 in. and of course, the advertisement is folded always on the outside. This is used particularly in wrapping lamps not sold by the carton, although it is a convenient size for all small packages.

Cuts of this sort, although not always with such an appropriate play on words, can be obtained free of charge from most of the manufacturers so that the only cost in-

Convenient Portable Stand for Floor Lamp Displays



To facilitate the displaying of floor lamps at the office of the Worcester (Mass.) Electric Light Company, the platform shown in the accompanying illustration has been devised. It is about 8 feet long by 3 feet

wide, mounted on casters, and contains a pocket or recess on each side to house the flexible leads serving the lamps. Hinged covers protect the outlets and plugs and the platform easily exhibits a dozen lamps.

That Are Used by Successful Retailers

volved in adding this distinctive touch to parcels going out from your store would be the cost of printing alone. Not only is the advertisement a good one as it reaches the person carrying the package and those who may see him doing so, but it is surprising in how many households wrapping paper is kept and reused.

Price Tags — and the Sensitive Prospect

BY A. E. PERKS

Being just an ordinary layman, and not one bit of an electrician, it might be safely assumed that I don't know just what an electric iron costs, and if I think of buying one, with the limited means of most ordinary men, I might be greatly interested in knowing what the price is.

But I have hunted several cities high and low in search of a display window with a label telling me how much I would have to pay for an electric iron, and in vain.

There is a line of electric irons I see advertised in the papers, with the price advertised. But I might want to know whether the one in the store window is cheaper or dearer than the one I saw advertised. And I don't like to go in, be told the price in condescending tones as from one who is above such trifles as the price of goods, and then be coldly stared at as I find it beyond my means and quit.

Shamed or Frightened Away

If it is too dear, I will either not buy it, or else if I do so out of shame, rather than face the cold stare as I walk out of the store, I shall feel a horrible grudge against that electrical dealer for ever. If I meet that predicament too often, I shall get a distaste for electrical stores generally, and install gas or any old thing rather than face an electrical man any more.

There may be some trades in which it is considered advisable to emphasize quality rather than price. That would no doubt apply to electric wiring, lamps, and the ordinary lines that a man has to get anyhow. In this case, the first thing that appeals to him is not, how much it costs, but what value he is getting for his money.

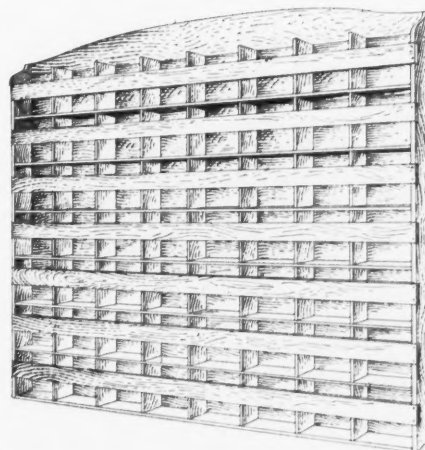
When it comes to the line of tempting things that many electrical stores regularly lay out in the window, such as electric coffee filters, irons, hair curlers, immersion heaters, washing machines, motors for the sewing machine, and so forth, although the relative question of quality does arise, the first consideration is "Can I afford it?" To answer that question, the buyer must know what it costs.

If the electrical dealer puts the price in the window, he wins both ways. If it is too dear for me, I am his good friend for life, out of gratitude for his having saved me the humiliation of entering a store and there making public confession of my too great poverty. If it is within my means, I will probably sail right in and buy it.

But it is no good in the world notifying me through your window display that the thing the price of which you refuse to tell me, is suitable for use as an iron, or as a pair of curling tongues, or for toasting bread.

Probably that is why so many

A Booklet and Circular Cabinet That Invites Customers to Help Themselves



The wall cabinet shown above is similar to two in use in the Westchester Electrical Supply Company's store at White Plains, N. Y. Neat, helpful electrical booklets and circulars are featured in these cabinets, one of which hangs invitingly on the wall near the cash register. The other one has been placed handily at the right of the doorway as you go out. In these positions one or the other is practically certain to get the attention of every customer. These attractive cabinets harmonize in style and finish with the rest of the store equipment and have proven very effective in getting good electrical appliance selling helps into the hands of desirable prospects.

people buy by catalogue from mail order houses. The catalogue shows the price of everything.

Isn't there a lesson here that electrical dealers will heed?

"See-through" Windows Replaced by Background Type

Nearly all of the show-windows of a large merchandising chain were formerly of the open or "see-through" type, permitting a view of the interior of the store from the street. "We found that under certain conditions (time of day, season of year, kind of weather, etc.)" reports the manager, "it was difficult to see the merchandise in the windows and impossible to see beyond the display and into the store."

At considerable expense these windows have been completely enclosed, and also equipped with better lighting units. The window displays are now brilliantly illuminated and the window dresser is able to achieve much more artistic effects. In fact, a solid background is absolutely essential to any scenic treatment of window displays, declares this manager, and no "open" window can be adequately lighted. Careful observations have proven beyond all doubt that the "pulling" power of these windows has been greatly increased since the change was made.

What Is Your Average Sale?

BY A. P. HIROSE

The readers' service department of *Electrical Merchandising* recently made an investigation to determine the average sum of money spent by customers in electrical dealers' or central-station stores.

Analysis of the returns showed that the average sale to a customer is \$4.52—the average sales recorded by store owners running from \$0.95 to \$10.

The same investigation also showed that these dealers were using wall show cases having a maximum height of 6½ feet to 7 feet. Some dealers said that a wall case could not be more than 6 feet high without having the stock at the top move slowly.

Reviving the "Dead Account"

Typical Letters the Electrical Merchant Can Use to Reclaim the Credit Customer Who Has Ceased Buying

By J. K. NOVINS

IN HIS anxiety to develop new business the average electrical retailer is apt to overlook the fact that a lot of good business lies dormant on his books, and that if he would only go through his credit records, pick out the names of customers who for some reason or other have ceased using their charge accounts, and follow these up systematically with good, stimulating letters, a lot of business that is ordinarily lost would thus be revived.

For the electrical retailer to develop again this old business requires less sales expense than is ordinarily required to develop new business. The problem, then, is how to approach the old, inactive credit customer. That it is worth the while to go to some expense to revive his business there is no question, especially when the records show that he paid his bills promptly and regularly.

Realizing the importance of this phase of credit work, the writer studied at first hand the various methods for reviving so-called dead accounts, as employed by some of the most enterprising merchants in all parts of the country, and in this article will be reproduced typical letters sent out by several representative business establishments.

Each Letter Has Slightly Different Approach

While the letters may not differ in substance, yet each approaches the matter in a slightly different way, and it is hoped that the reader of this article will gain a good idea on how to construct his own letters for a similar purpose. The essential quality in each letter is that it has some special appeal.

An analysis of the several letters to be reproduced here will present the following points:

First, such letters are short, almost never more than three paragraphs long. Second, the customer is called upon to state the reason or reasons for stopping to use the charge account, and to facilitate the

desired reply, a stamped and self-addressed envelope is enclosed with the letter. Third, the writer of the letter may presume that the customer has been displeased due to some lack of service, and in that case, he is always ready to find the defect and remedy it. Fourth, the letter talks up merchandise and service.

Let us now reproduce some typical letters used for such an occasion:

Letter, number 1:—

"In going over our books, we regret to notice that no charges have been passed on your account for some time, and we trust that this is not an indication that you have withdrawn your valued patronage from us.

"We realize that there are times when our service falls below the standard which we strive to maintain and also that it is possible for dissatisfaction to be caused to our customers which we would never hear of under ordinary circumstances. If you have reason to feel, therefore, that our service or merchandise has failed at any time to give you complete satisfaction, we hope you will be good enough to let us know."

Letter, number 2, sent by a Boston establishment:—

"We are always very much interested when we find that a customer's charge account has not been used for a long time, because it may be possible that we have failed in some particular to render the satisfying service that it is our intention to give at all times.

"It is with much regret, therefore, that we find you have not been making the accustomed use of your account during the past year.

"We would like very much to learn if anything has occurred that has not been satisfactory to you, as we are often able to improve our merchandise or service through suggestions received from customers."

Letter, number 3, sent by a Denver, Colo., establishment:—

"The activity of your account has always been of great interest to me, and when one of our desirable charge customers ceases to use his credit with us, I believe that the reason should be sought, for that is assistance to me in keeping in touch with conditions of our business.

"Your account has not been used for some little time and I will appreciate

your telling me just what caused you to stop trading here.

"For your convenience I am enclosing an envelope addressed to me so that your reply will be sure to reach me personally."

Letter, number 4, sent by a Milwaukee, Wis., establishment:—

"It is my job to look after the Schuster family of charge customers; to see that the Schuster establishment may render them the best service.

"Every Schuster customer is regarded as a valued friend and when our friends no longer visit us we are anxious to know why.

"I have been wondering for the past several weeks just why you have not used your charge account. Have you been unable to find just the things you wanted or has something happened in the past in which you feel we are at fault?"

"Would you be kind enough to use the reverse side of this letter to tell me just why your account is inactive?"

Letter, number 5, sent by a Duluth, Minn., establishment:—

Injects "Kick" by Demanding a Plain Answer

"You had a letter from us the other day; it wasn't a circular letter either. It was 'personal,' and so is this one.

"In that letter, which used up quite a good many words, we really asked just one simple question: Why do you not use your account at Gray's? We put it much more delicately than that, but that's really what it amounts to.

"Now we can't decently insist on an answer to that question; but we'd very much like to know. You may have so good a reason that when we know what it is we'll say—'you're right—we don't blame you'—and if so we should like to make it right.

"But we're not going to be quite satisfied until you tell us. For fear you haven't our stamped envelope handy, we enclose another.

"Tell us plainly—and we'll thank you."

The above letters are capable of general application, and judging from the experiences of those using them, they ought to bring pretty good results. It is all right to go out of the way to drum new trade, but there is an old maxim that ought always to be remembered, and that is, "A bird in the hand is worth two in the bush."

The Home Electrical

Section of *Electrical Merchandising*

In Two Sections
Section Two



Madame Olga Petrova

Electricity, the Hostess, and the Home

"Electrical America"—Where Electricity Discovers a New Job Every Day



Hollywood, Calif.—Oranges crushed electrically sweeten the warmth of California hospitality, since some inventive genius gave the world this electric orange crusher. Virginia Valli uses hers every day, or whenever she receives callers, which is saying the same thing, in the case of this popular screen favorite.

Huntington, L. I.—New York is being treated to something new in the way of concert or recital programmes—by means of the "Clavilux," the first instrument to make possible the use of light as a fine art. Thomas Wilfred of Huntington, "Clavilux" inventor, recently drew an interested audience to his recital in Aeolian Hall. A novel programme was presented, ranging from Mr. Wilfred's own Opus 12 (Solo: single form, unfolding and closing; key: magenta, turquoise and white) to his Opus 26, a "Trio in Black and White," this being "a study in texture, depth and graceful motion."



A colorful moment from one of Mr. Wilfred's compositions is reproduced in the picture at the left. The visual composition is projected in silence on a large white screen.

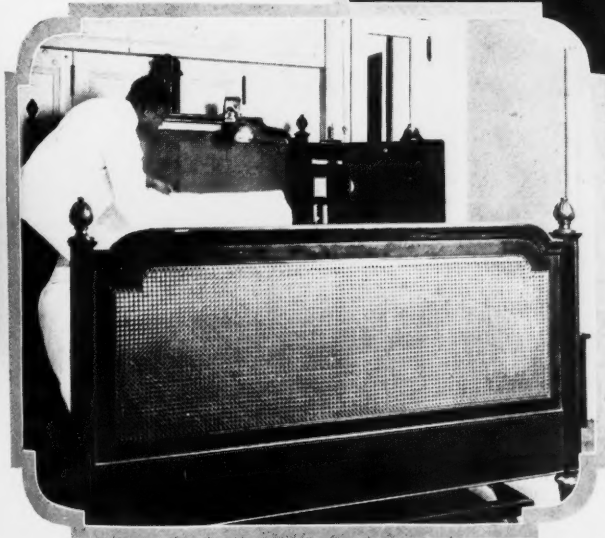
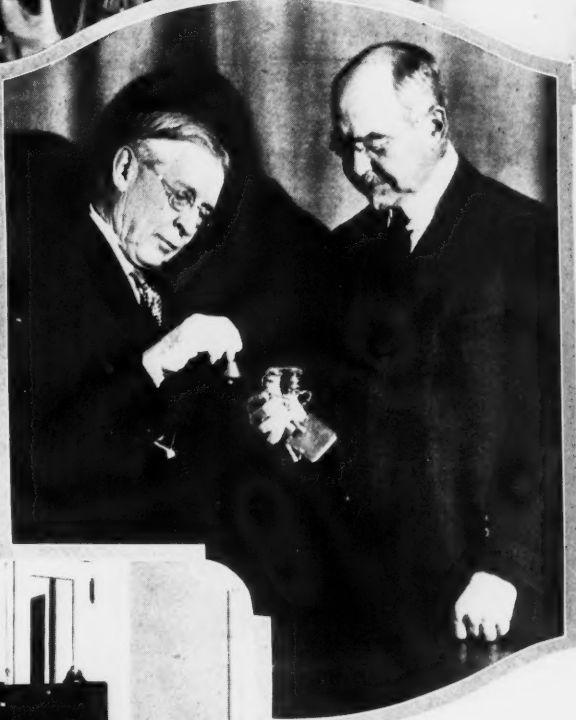
Nasho
who'll
and o
honey
favori
today
stra

Albany
power
was ap
pioneer
recent
birthda
bell wa
original
held by
New Y
Rice, Jr.



Nashville, Tenn. — "Waffles, waffles — who'll eat more waffles?"—waffles, crisp and crunchy, dripping with butter and honey! Traditionally the true Southerner's favorite dish, waffles are more popular today than ever before—as was demonstrated at Nashville's electrical home.

Albany, N. Y. — Back in 1831, the first power ever developed by an electro-magnet was applied to ring a bell by Joseph Henry, pioneer electrical inventor. During a recent radio programme celebrating the birthday of Henry, the sound of this very bell was broadcasted. In the picture, the original bell and electro-magnet are being held by Dr. John M. Clarke, director of New York State Museum, and E. W. Rice, Jr., of the General Electric Company.



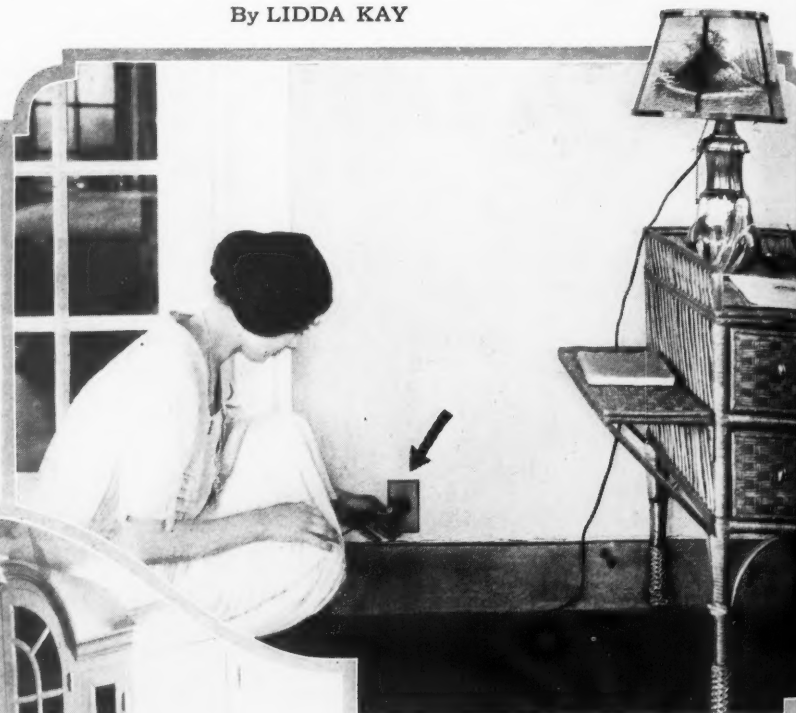
New York City—Capping a New York skyscraper, little suspected by the thousands who daily pass in the street below, is one of the most remarkable homes in America—the apartment of Henry L. Doherty, president of a hundred or more public utility companies. From breakfast-room to gymnasium, the apartment is equipped with electrical conveniences, served by 64 electric outlets. One of the most novel features is Mr. Doherty's own electric bed-on-wheels, which at a touch of the switch travels out on tracks to the roof garden "under the stars."

Where to Place the Electric Outlets

Their Convenient Position Marks the Difference Between the Carefully-Planned Home and the Home Bearing the "Anything-Will-Do" Stamp

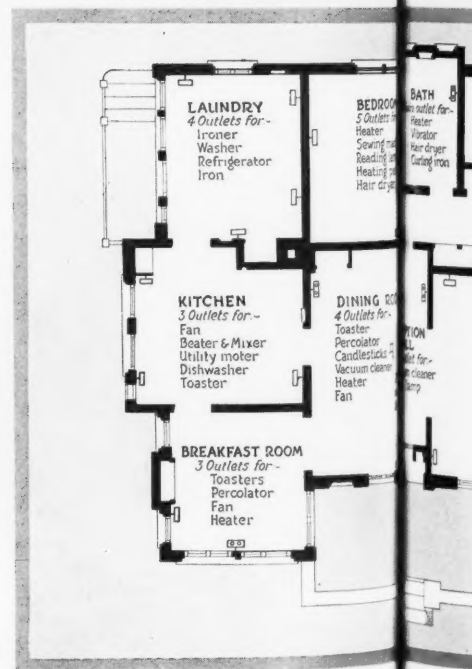
By LIDDA KAY

One doesn't move table lamps and floor lamps around very frequently, so that outlets to serve these are most conveniently placed in the baseboard or low in the wall. Two twin-outlet plates on opposite sides of a room are a good minimum rule to follow.



Electric outlets in the kitchen should be so placed as to be available for every demand—in the wall within arm's reach of any working space, whether that be table, kitchen cabinet, kitchen closet, or cooking range. Here they must serve not only

the electric heater and utility motor, but on occasions the electric iron, fan, percolator, dishwasher, grill or waffle iron.



When one is entertaining guests, there is a very real satisfaction in showing the modern service one has built into the house, and in being able to put modern comfort

and unexpected little conveniences at their disposal. When you wish to connect a table lamp, an electric fan or a heater at a certain point, is an outlet always available?

Today, when so much is known of the convenience of electricity, there are wide possibilities for the exercise of careful judgment in the placing of outlets.



In the laundry, ease of connection and disconnection is the main consideration, so that outlets for the washing machine, iron, ironer, fan, dryer or heater should be waist-high.



lets, for connecting the toaster, percolator, or waffle iron. All the family helps at an electrical breakfast, but their joy in this will lose its flavor if electrical connections have to be made by crawling under the table or getting a step-ladder to reach ceiling fixtures.



Just as no house can call itself modern without a breakfast nook, so no breakfast nook is complete without its electric out-

Switching the House for Convenience



If the switch is to the electric current what the faucet is to the water system, then many of us today, in respect to electrical convenience, are in the position of having to unscrew the faucet before we can have a glass of water. The importance of switches has not always been recognized by home builders. Yet without them electricity is denied half its power of service.



Children dread dark rooms—and even the hardest of us, alarmed at night by a suspicious sound, have felt qualms about plunging into the darkness of adjacent rooms for the purpose of investigating.

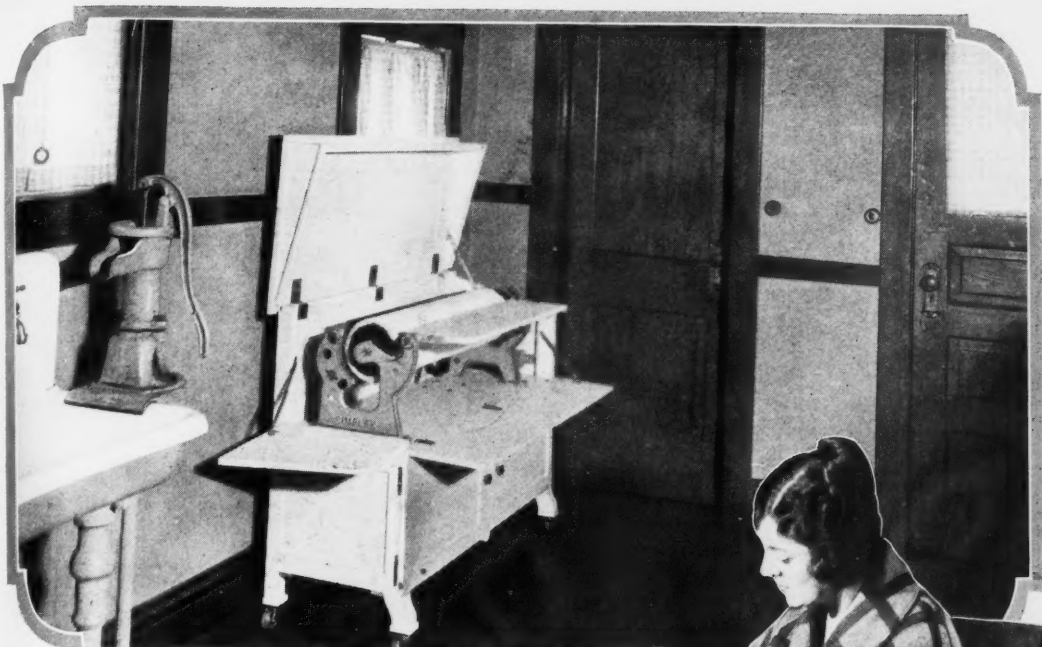
Certainly, the center light in every room should be controlled by a switch near the door. In addition, there should be enough switches to enable one to turn on or off the light in the room in which one is, and to turn on or off the lights in the adjacent room. In this way, one can make a continuous path of light as one advances.

With three-way switches at the head and foot of the stairs, one can also control the lights upstairs or downstairs from either position.

Even as part of the decorative plan of a room, the switch plate has possibilities. Today one may have gold, cream, "mahogany," rose or blue switch plates, to match the woodwork or harmonize with the wall paper. Or the switch plate may strike a gayer note, with a hand-painted decoration of a parrot, peacock or conventional flower pattern. (Above, left.)

Also,
Dis

Quite the
fine porce
one show
having
electric
built in
turning
the dis
water, a
streams
the dish
installed
houses,
gene



Finding Space for the Ironer

It was a woman who once exclaimed, "Oh, I want an electric ironing machine so badly I'd even put one in my kitchen to find room for it!" No sooner said than done—even the pocket handkerchief apartment now has space for this ironer, which folds back into a cabinet, leaving a handsome kitchen table for service between ironing days.



New Things Electrical

Also, a Built-in Dishwasher

Quite the last word in fine porcelain sinks is the one shown at the right, having a complete electric dishwasher built into it. Just turning the faucet fills the dishwasher with water, and sends hot streams gushing over the dishes. It is being installed in the newest houses, and winning general favor.



They Banish Chills!

Warm and comfy in her new bathrobe and shoes, one wouldn't think she was wound round with 15,000 feet of wire, energized by plugging-in to an ordinary electric outlet! This is the new electric health garment, and these are the shoes, both interwoven with double-insulated wire, designed for the relief of rheumatism, gout and similar ailments.

Three Epicures Who Know Indorse Electrical Cookery



When a young actress achieves stardom as rapidly as did Winifred Lenihan—star and only woman in Shaw's newest play, "Saint Joan"—the public wants to know anything and everything about her. It may not be the most important fact concerning Miss Lenihan, but even this has its interest—she likes her coffee electrically made!

Jim Corbett—otherwise "Gentleman Jim," otherwise James J.—has a smile that's famous the world over—but, oh boy, have you seen him smile when he lifts a waffle, warm and fragrant, from an electric waffle iron?



Madge Kennedy now delighting New York in "Poppy," loves tea—in fact, any time is tea-time to her, and, with an electric samovar, any place will do, too! When this picture was taken, Miss Kennedy was discussing over the teacups the important subject of gowns with her costume designer.



Home
Electrical
Copyright
McGraw-Hill
Company
New York City

Prying Into New Business with a Screw Driver

Taking a Cue from the Automobile Field—Possibilities of Inspection Service and Maintenance for Increasing Business

By C. ROBERTSON

SOME bright morning when you drive your car into the William Tell Garage to get a job done on it, Bill may hand you a surprise. "How much'll it be?" you'll ask him. And Bill may say \$1.50 an hour. And very likely Bill used to charge you \$1.25 an hour, or perhaps only a dollar. And when he comes back by telling you that his shop is now completely equipped, so that his charge *per hour* is a few per cent higher but his charge *per job* is a whole handful of per cents lower you'll find, probably, that the S.E.A. has gotten after him.

S.E.A. stands for Service Equipment Associates—folks who make automotive apparati, machinery and do-winkles that are used to handle the maintenance of cars. Those fellows got together a while back and said "Here! There are so many millions of cars in use in this country this year. There are so many repair shops. Plenty of maintenance business for everybody provided everybody is set to handle it. Let's sell them better maintenance equipment and help 'em get more of this maintenance business."

So that's what may have started Bill on the way to a better shop and given you—a motor car user—better and cheaper maintenance service.

Applying the Service Idea to the Electrical Field

All right. Now there's a couple of hunches in all that that can be hauled over the garage fence and plopped down in our electrical contracting back yard.

First, there are a great many thousands of electric motors and industrial appliances in use. Never mind the figure. You have a good idea of the number in your neighborhood and that's what counts. Now the best motors in the world, like the best motor cars in the world, need some maintenance. Users are only human and motors are only mechanical. In this difference lies much room for philosophy and much room for profit, which pays

bills considerably faster in our present state of civilization.

That industrial maintenance business lumps up surprisingly. Every place that uses motors and electric glue pots and lights has some maintenance money to pay out. A call at every industrial plant within a radius of, say, five miles, will give you a better picture of the situation. The little things that have to be done can be charged for at a profit. Regular inspections can be arranged for too, just as our garage friends give cars weekly or monthly look-overs for a stated sum.

And once you get a business reason to visit a plant regularly you get a chance to study it from the inside; to talk with foremen and workmen—and to foresee the need for new equipment in time to get after the sale from the ground up. You know the plant. You're the logical man to help them pick out what they need.

Second, there are flocks of electric appliances in homes all around you. I know, right now, where there's an electric clothes washer eight years old that hums its way through a six passenger wash every Monday morning. You know some a heap older than that. And dish-washers, vacuum cleaners, irons, percolators and toasters.

Every one of them has to have a cord. Every one with a motor has to have gears or a belt or a chain. Brushes, bearings and commutators wear. There's a tremendous maintenance job to be done on household appliances every day in the year.

Besides paying a profit, that situation has another advantage that's even bigger. It gives the house-to-house man a graceful ingress—that is, if ingress means to ooze over the front door sill without the use of blackjacks.

If you're bossing a group of residence salesmen you know the hardest bump a new man gets is when that first front door opens and a woman gives him that "well-who-gave-you-

permission-to-ring-my-bell" look. The salesman's tongue passes instantly into the hands of the traditional cat. He feels like a quick, meek apology and a hundred yard dash.

But this maintenance thing puts an introduction in his mouth and a pair of pliers and a screw driver in his pocket. The minute the door flops open he has a story ready to tell. He understands there is a cord on one of the appliances that needs fixing. That's right, isn't it? Fine! He is with the Stability Electric Company. He'll fix one cord free and explain how his maintenance service costs only so much a month and keeps all the appliances in repair. By the way, may he have a list of them? That will help him to keep track of them.

Getting a Survey of the Homeowner's Appliances

That opens the way for him to get a survey of the domestic electrical equipment and perhaps sell a few items on that first call. And it gives him a chance to get himself invited to call at regular intervals, primarily to maintain the things that are in service and incidentally to follow up with more sales as fast as he can develop them.

Late winter or spring is a fine time to keep this maintenance idea in mind. I know a dealer who will give free instruction on any kind of appliance, sold by anybody at all. Any person in his town who gets a new appliance for a gift and is a bit puzzled about how to use it can call him up and say "Send me somebody to tell me how to make my electric wringer go backwards." And up trots an agreeable young man who does just that—and maybe arranges for a suitable outlet near the new washing machine and a lighting unit over it that will enable Tosca to see what she's doing when she uses it.

Our little playmate, the public, is buying electric appliances at an astonishing rate. Every year the rate gets astonishinger and astonishinger. Once you get the thrill of maintenance possibilities you'll see what this enormous yearly increase can do in the way of expanding your business. It's not a half-bad idea to equip your salesmen with maintenance screw drivers—and let them pry into new business as they maintain.

Experience in Paying Store Salespeople

Retail Compensation Plans and Salesperson-Expense Figures, Abstracted from Newest McGraw-Hill Book, "Retail Advertising and Selling"

By S. ROLAND HALL

THERE are undoubtedly more retail merchants who are following the plan of paying straight salary than have adopted any other method, but a growing number have seen the advisability of basing the salaries of their helpers either on gross sales or gross profits.

A number of well known stores that have worked out an analysis of their selling costs for each department, take their salespeople into their confidence and let them see just what salary-cost the department or goods can stand. A quota or standard task is then made the basis for the weekly or monthly salary. This method often results in salespeople discovering that they were not over-worked, after all, and makes them resist the introduction of new employees into their departments instead of making a plea for extra help.

Bonus on Certain Goods

The system, familiarly known as the P. M. system, whereby retailers pay their salespeople a premium for disposing of shop-worn, out-of-style, or other slow moving goods, has its good points and also its unsatisfactory side. Many of the better stores do not use it but merely make special prices on slow moving goods, advertise them aggressively and let them sell themselves.

A variation of the bonus system is the plan of "playing up the higher-priced goods" and paying a special commission or bonus on such sales. For example, if the customer asks for \$2 shirts, the salesman, instead of contenting himself with showing only \$2 goods, is encouraged by the system to display higher grades. It often happens that the customer, when he sees the better goods, prefers to buy them. In general, people have a little margin beyond the limit they may set when naming the price-grade of the goods they want to see.

The growing tendency to base the compensation of retail salesmen on the amount of their sales, checked

up with the sales-cost percentage, makes it desirable for every retailer to have at his command reliable data as to selling costs. Naturally, any table of this kind must be more or less general, because the locality, the size of the store, and many other factors enter into costs. Nevertheless, the table in Fig. 1, made up by the *Retail Ledger* from first-hand data, affords a general guide. The larger chart shown in Fig. 2 saves figuring or working out just what an employee's sales cost is. While quotas and bonuses are playing an important part in sales practice, the method of fixing compensation on sales cost is, after all, a simple and an equitable one. It is a system that is likely to remove the feeling that an employee sometimes has that he is being discriminated against.

Suppose an employee in a store,

who is getting \$13 a week, approaches his manager with a plea for an increase to \$18. If his total sales have averaged only \$150 a week, the manager can quickly show him by Fig. 2 that his salary is already 9 per cent of his sales, and by referring to the smaller chart, illustrated in Fig. 1, let him see that in general the salary cost of grocery stores runs to 8.46 per cent. This makes it clear that the employee is already receiving a little more money, on a percentage basis, than salesmen occupying similar positions. The manager can go further and run his pencil down the \$18 column and indicate that this salary would be equitable to the store when the sales total is from \$210 to \$220 a week.

As the charts are nothing but the result of accurate percentage calculations, the intelligent employee can hardly quarrel with their indications. Fig. 1 is also a good check against other expenses. It shows the proprietor whether or not a rent or advertising expense is higher than the average in his division of business.

Chain-Store Practice

The compensation plan used by most chain stores is that of paying the general manager a percentage of all sales over a specified quota. The district manager gets his percentage on the earnings of district stores.

In the Woolworth organization, employees are paid on the commission plan. At the New York headquarters the basis for compensation of executives is the earnings of the entire business. Each district manager receives his pay on the basis of his district's earnings. Likewise, the manager and assistant manager of the separate store receive compensation based on what the store earns. A cash bonus is given to every employee who has been with the company a year. A similar amount is added each year for five years. A woman leaving to marry, after having been with the company three years, receives a cash present.

"Retail Advertising and Selling"

UNDER the above title the McGraw-Hill Book Company, 370 Seventh Avenue, New York City, publishers of books for *Electrical Merchandising*, this month issues the latest addition to its series of handbooks by S. Roland Hall, devoted to advertising, merchandising and business topics. The accompanying article is abstracted from advance sheets of this newest handbook for retailers, other chapters of which have the following headings:

- Costs of Selling
- Turnover and Price Figuring
- Store Equipment and Layout
- Window-Display Merchandising
- Planning and Managing
- Newspaper Advertising
- Manufacturers' Advertising
- Helps
- Direct Advertising
- The Writing of "Copy"
- Training the Sales Force

FIG. 1. VARIOUS ITEMS OF EXPENSE IN THE PRINCIPAL BRANCHES OF RETAIL TRADE

| Items of expense | Kind of store | | | | | | | |
|---|----------------------|-------------------|----------------------------|-----------------------------|--------------------------------|-------------------|----------------------|--------------------------------------|
| | Grocery, Per Cent | Drug, Per Cent | Hard- ware, Per Cent | Furni- ture, Per Cent | Men's Clothing, Per Cent | Shoe, Per Cent | Jewelry, Per Cent | Depart- ment Store Per Cent |
| Rent..... | 3.07 | 4.02 | 3.41 | 5.04 | 3.04 | 3.21 | 4.98 | 3.24 |
| Salaries..... | 8.46 | 10.95 | 10.11 | 9.73 | 9.49 | 10.51 | 10.96 | 9.65 |
| Advertising..... | 1.83 | 2.76 | 1.12 | 3.72 | 3.16 | 2.65 | 2.85 | 4.67 |
| Heat and light..... | .39 | .69 | .43 | .92 | .62 | 1.10 | .61 | .54 |
| Delivery..... | 2.53 | .51 | .91 | .94 | .65 | .46 | .09 | 1.02 |
| Supplies..... | .37 | .36 | .60 | .41 | .43 | .30 | .89 | .38 |
| Insurance and taxes..... | .58 | 1.21 | .99 | 1.57 | 1.07 | 1.03 | 1.32 | 1.08 |
| General expenses..... | .45 | 4.49 | 2.01 | 1.10 | 2.31 | 4.36 | 3.95 | 4.15 |
| Depreciation and shrinkage..... | .76 | .47 | .52 | 2.14 | 2.16 | .50 | .95 | 1.11 |
| Bad debts..... | .47 | .19 | .31 | 1.94 | .34 | .10 | .21 | .21 |
| Percentage of total expenses to sales..... | 18.91 | 25.65 | 20.41 | 27.51 | 23.27 | 24.22 | 26.81 | 26.05 |

These figures represent the common experience in percentage of net sales, as compiled by the National Association of Newspaper Executives. They were compiled from data

furnished by the Harvard Bureau of Business Research and other retail research organizations.

(From Retail Ledger, March 15, 1921).

The method of the United Cigar Stores is that of providing extra pay, based on amount of sales—not on profits. This concern holds that its employees then have no desire to push the goods bearing the most profit.

The method of the Penney dry goods chain, operating more than 400 stores, gives the branch manager the opportunity to conduct business almost as if he were a partner and to receive his compensation on such basis.

Extra Compensation for Minimum Overhead

In general, branch-store managers in the principal chain-store systems are expected to keep overhead at a minimum, and the reward for such endeavor is extra compensation. An example of this is the method of a system of drug stores paying all store managers a bonus of \$25 a month for keeping down their expenses (aside from rent and advertising) to 15 per cent of sales. Rent and advertising are not regarded as factors, because these are the specific concern of the home office.

Following is the method for arriving at the 15 per cent expense permitted:

| | |
|-----------------------------------|-------------|
| Salaries and commissions | 10 per cent |
| Light, heat, water..... | 1½ per cent |
| Contingent, renewal expenses..... | 1½ per cent |
| Supplies..... | 2 per cent |

Total15 per cent

A competitive spirit is engendered by this standard. Each manager strives to make a better showing for his store over that of the others in the system. While 15 per cent is laid down as the yardstick of good management, as it were, it is not impossible to outdo this percentage. Greater volume of sales and turnover,

or careful watch over expenses without increase of volume, help toward the desired result.

The Lord & Taylor organization, of New York, has a regular rating system, each salesman rating monthly in personality, production and loyalty.

Promotions or increases in salary are based on these ratings, and all salespeople are compensated on the straight salary basis, no commission or bonuses based on sales being paid.

1. *Health.* In rating for health, consider regularity of attendance, attitude toward work and general physical condition.

2. *Appearance.* In rating for appearance, consider neatness, cleanliness and conformity to the dress regulation.

3. *Manner.* In rating for manner, consider courteous treatment of customers, and of other employees.

4. *Initiative.* In rating for initiative, consider resourcefulness, and ability to work without continual direction.

5. *Industry.* In rating for industry, consider constancy of application to work.

6. *Accuracy.* In rating for accuracy, consider correctness in the execution of every detail.

7. *Loyalty.* In rating for loyalty, consider faithfulness to a personal ideal and to the interests of Lord & Taylor.

8. *Co-operation.* In rating for co-operation, consider willingness to work with others.

9. *Responsibility.* In rating for responsibility, consider reliability in the discharge of every duty.

10. *Knowledge.* In rating for knowledge, consider possession of necessary information.

Straight Commission Arrangement Not Customary

Although compensation on the straight commission basis is not customary in retail selling, a Kansas merchant has adopted the following basis of sales cost, so far as salary is concerned:

| Class Of Goods | Per Cent Allowed For Compensation Of Salesman |
|---------------------|---|
| Hats and caps..... | 6½ |
| Furnishings..... | 6 |
| Men's clothing..... | 5 |
| Work clothing..... | 5 |
| Boys' clothing..... | 5 |

After nearly a year of experience with the new system, the merchant—Spines Clothing Company, Wichita, Kan.—reports that both the firm and its employees are well satisfied with the results attained.

A Chart for Checking Store Sales Expense with Salary

| Clerk's Weekly Sales | Clerk's Weekly Salaries | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|-------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----|
| | 100 | 105 | 11 | 115 | 12 | 125 | 13 | 135 | 14 | 145 | 15 | 155 | 16 | 165 | 17 | 175 | 18 | 185 | 19 | 195 | 20 | 205 | 21 | 215 | 22 | 225 | 23 | 235 | 24 | 245 | 25 | 255 | 26 | 265 | 27 | 275 | 28 | 285 | 29 | 295 | 30 | 305 | 31 | 315 | 32 | 325 | 33 | 335 | 34 | 345 | 35 | 355 | 36 | 365 | 37 | 375 | 38 | 385 | 39 | 395 | 40 | 405 | 41 | 415 | 42 | 425 | 43 | 435 | 44 | 445 | 45 | 455 | 46 | 465 | 47 | 475 | 48 | 485 | 49 | 495 | 50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 100 | 10.0 | 10.5 | 11.0 | 11.5 | 12.0 | 12.5 | 13.0 | 13.5 | 14.0 | 14.5 | 15.0 | 15.5 | 16.0 | 16.5 | 17.0 | 17.5 | 18.0 | 18.5 | 19.0 | 19.5 | 20.0 | 20.5 | 21.0 | 21.5 | 22.0 | 22.5 | 23.0 | 23.5 | 24.0 | 24.5 | 25.0 | 25.5 | 26.0 | 26.5 | 27.0 | 27.5 | 28.0 | 28.5 | 29.0 | 29.5 | 30.0 | 30.5 | 31.0 | 31.5 | 32.0 | 32.5 | 33.0 | 33.5 | 34.0 | 34.5 | 35.0 | 35.5 | 36.0 | 36.5 | 37.0 | 37.5 | 38.0 | 38.5 | 39.0 | 39.5 | 40.0 | 40.5 | 41.0 | 41.5 | 42.0 | 42.5 | 43.0 | 43.5 | 44.0 | 44.5 | 45.0 | 45.5 | 46.0 | 46.5 | 47.0 | 47.5 | 48.0 | 48.5 | 49.0 | 49.5 | 50.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 110 | 9.1 | 9.6 | 10.0 | 10.5 | 11.0 | 11.4 | 11.8 | 12.3 | 12.7 | 13.2 | 13.6 | 14.1 | 14.5 | 15.0 | 15.4 | 15.9 | 16.4 | 16.8 | 17.3 | 17.8 | 18.2 | 18.7 | 19.1 | 19.6 | 20.0 | 20.5 | 21.0 | 21.4 | 21.9 | 22.3 | 22.8 | 23.2 | 23.7 | 24.1 | 24.6 | 25.0 | 25.5 | 26.0 | 26.4 | 26.9 | 27.3 | 27.8 | 28.2 | 28.7 | 29.1 | 29.6 | 30.0 | 30.5 | 31.0 | 31.4 | 31.9 | 32.3 | 32.8 | 33.2 | 33.7 | 34.1 | 34.6 | 35.0 | 35.5 | 36.0 | 36.4 | 36.9 | 37.3 | 37.8 | 38.2 | 38.7 | 39.1 | 39.6 | 40.0 | 40.5 | 41.0 | 41.4 | 41.9 | 42.3 | 42.8 | 43.2 | 43.7 | 44.1 | 44.6 | 45.0 | 45.5 | 46.0 | 46.4 | 46.9 | 47.3 | 47.8 | 48.2 | 48.7 | 49.1 | 49.6 | 50.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 120 | 8.3 | 8.8 | 9.2 | 9.6 | 10.0 | 10.4 | 10.8 | 11.3 | 11.7 | 12.1 | 12.5 | 12.9 | 13.3 | 13.7 | 14.1 | 14.5 | 15.0 | 15.4 | 15.8 | 16.2 | 16.7 | 17.1 | 17.5 | 18.0 | 18.4 | 18.8 | 19.2 | 19.7 | 20.1 | 20.5 | 21.0 | 21.4 | 21.8 | 22.3 | 22.7 | 23.1 | 23.6 | 24.0 | 24.4 | 24.9 | 25.3 | 25.8 | 26.2 | 26.7 | 27.1 | 27.5 | 28.0 | 28.4 | 28.9 | 29.3 | 29.8 | 30.2 | 30.7 | 31.1 | 31.6 | 32.0 | 32.5 | 32.9 | 33.4 | 33.8 | 34.3 | 34.7 | 35.2 | 35.6 | 36.1 | 36.5 | 37.0 | 37.4 | 37.9 | 38.3 | 38.8 | 39.2 | 39.7 | 40.1 | 40.6 | 41.0 | 41.5 | 41.9 | 42.4 | 42.8 | 43.3 | 43.7 | 44.2 | 44.6 | 45.1 | 45.5 | 46.0 | 46.4 | 46.9 | 47.3 | 47.8 | 48.2 | 48.7 | 49.1 | 49.6 | 50.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 130 | 7.5 | 8.1 | 8.5 | 8.9 | 9.3 | 9.7 | 10.1 | 10.6 | 11.0 | 11.5 | 11.9 | 12.3 | 12.7 | 13.1 | 13.6 | 14.0 | 14.4 | 14.9 | 15.3 | 15.7 | 16.2 | 16.6 | 17.0 | 17.5 | 17.9 | 18.3 | 18.8 | 19.2 | 19.7 | 20.1 | 20.6 | 21.0 | 21.5 | 21.9 | 22.4 | 22.8 | 23.2 | 23.7 | 24.1 | 24.6 | 25.0 | 25.5 | 25.9 | 26.4 | 26.8 | 27.2 | 27.7 | 28.1 | 28.6 | 29.0 | 29.5 | 29.9 | 30.4 | 30.8 | 31.3 | 31.7 | 32.1 | 32.6 | 33.0 | 33.5 | 33.9 | 34.4 | 34.8 | 35.3 | 35.7 | 36.2 | 36.6 | 37.0 | 37.5 | 37.9 | 38.4 | 38.8 | 39.3 | 39.7 | 40.2 | 40.6 | 41.1 | 41.5 | 42.0 | 42.4 | 42.9 | 43.3 | 43.8 | 44.2 | 44.7 | 45.1 | 45.6 | 46.0 | 46.5 | 46.9 | 47.4 | 47.8 | 48.3 | 48.7 | 49.2 | 49.6 | 50.1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 140 | 6.7 | 7.1 | 7.5 | 7.9 | 8.3 | 8.6 | 9.0 | 9.4 | 9.8 | 10.2 | 10.6 | 11.0 | 11.4 | 11.8 | 12.2 | 12.6 | 13.0 | 13.4 | 13.8 | 14.2 | 14.6 | 15.0 | 15.4 | 15.8 | 16.2 | 16.6 | 17.0 | 17.4 | 17.8 | 18.2 | 18.6 | 19.0 | 19.4 | 19.8 | 20.2 | 20.6 | 21.0 | 21.4 | 21.8 | 22.2 | 22.6 | 23.0 | 23.4 | 23.8 | 24.2 | 24.6 | 25.0 | 25.4 | 25.8 | 26.2 | 26.6 | 27.0 | 27.4 | 27.8 | 28.2 | 28.6 | 29.0 | 29.4 | 29.8 | 30.2 | 30.6 | 31.0 | 31.4 | 31.8 | 32.2 | 32.6 | 33.0 | 33.4 | 33.8 | 34.2 | 34.6 | 35.0 | 35.4 | 35.8 | 36.2 | 36.6 | 37.0 | 37.4 | 37.8 | 38.2 | 38.6 | 39.0 | 39.4 | 39.8 | 40.2 | 40.6 | 41.0 | 41.4 | 41.8 | 42.2 | 42.6 | 43.0 | 43.4 | 43.8 | 44.2 | 44.6 | 45.0 | 45.4 | 45.8 | 46.2 | 46.6 | 47.0 | 47.4 | 47.8 | 48.2 | 48.6 | 49.0 | 49.4 | 49.8 | 50.2 | 50.6 | 51.0 | 51.4 | 51.8 | 52.2 | 52.6 | 53.0 | 53.4 | 53.8 | 54.2 | 54.6 | 55.0 | 55.4 | 55.8 | 56.2 | 56.6 | 57.0 | 57.4 | 57.8 | 58.2 | 58.6 | 59.0 | 59.4 | 59.8 | 60.2 | 60.6 | 61.0 | 61.4 | 61.8 | 62.2 | 62.6 | 63.0 | 63.4 | 63.8 | 64.2 | 64.6 | 65.0 | 65.4 | 65.8 | 66.2 | 66.6 | 67.0 | 67.4 | 67.8 | 68.2 | 68.6 | 69.0 | 69.4 | 69.8 | 70.2 | 70.6 | 71.0 | 71.4 | 71.8 | 72.2 | 72.6 | 73.0 | 73.4 | 73.8 | 74.2 | 74.6 | 75.0 | 75.4 | 75.8 | 76.2 | 76.6 | 77.0 | 77.4 | 77.8 | 78.2 | 78.6 | 79.0 | 79.4 | 79.8 | 80.2 | 80.6 | 81.0 | 81.4 | 81.8 | 82.2 | 82.6 | 83.0 | 83.4 | 83.8 | 84.2 | 84.6 | 85.0 | 85.4 | 85.8 | 86.2 | 86.6 | 87.0 | 87.4 | 87.8 | 88.2 | 88.6 | 89.0 | 89.4 | 89.8 | 90.2 | 90.6 | 91.0 | 91.4 | 91.8 | 92.2 | 92.6 | 93.0 | 93.4 | 93.8 | 94.2 | 94.6 | 95.0 | 95.4 | 95.8 | 96.2 | 96.6 | 97.0 | 97.4 | 97.8 | 98.2 | 98.6 | 99.0 | 99.4 | 99.8 | 100.2 | 100.6 | 101.0 | 101.4 | 101.8 | 102.2 | 102.6 | 103.0 | 103.4 | 103.8 | 104.2 | 104.6 | 105.0 | 105.4 | 105.8 | 106.2 | 106.6 | 107.0 | 107.4 | 107.8 | 108.2 | 108.6 | 109.0 | 109.4 | 109.8 | 110.2 | 110.6 | 111.0 | 111.4 | 111.8 | 112.2 | 112.6 | 113.0 | 113.4 | 113.8 | 114.2 | 114.6 | 115.0 | 115.4 | 115.8 | 116.2 | 116.6 | 117.0 | 117.4 | 117.8 | 118.2 | 118.6 | 119.0 | 119.4 | 119.8 | 120.2 | 120.6 | 121.0 | 121.4 | 121.8 | 122.2 | 122.6 | 123.0 | 123.4 | 123.8 | 124.2 | 124.6 | 125.0 | 125.4 | 125.8 | 126.2 | 126.6 | 127.0 | 127.4 | 127.8 | 128.2 | 128.6 | 129.0 | 129.4 | 129.8 | 130.2 | 130.6 | 131.0 | 131.4 | 131.8 | 132.2 | 132.6 | 133.0 | 133.4 | 133.8 | 134.2 | 134.6 | 135.0 | 135.4 | 135.8 | 136.2 | 136.6 | 137.0 | 137.4 | 137.8 | 138.2 | 138.6 | 139.0 | 139.4 | 139.8 | 140.2 | 140.6 | 141.0 | 141.4 | 141.8 | 142.2 | 142.6 | 143.0 | 143.4 | 143.8 | 144.2 | 144.6 | 145.0 | 145.4 | 145.8 | 146.2 | 146.6 | 147.0 | 147.4 | 147.8 | 148.2 | 148.6 | 149.0 | 149.4 | 149.8 | 150.2 | 150.6 | 151.0 | 151.4 | 151.8 | 152.2 | 152.6 | 153.0 | 153.4 | 153.8 | 154.2 | 154.6 | 155.0 | 155.4 | 155.8 | 156.2 | 156.6 | 157.0 | 157.4 | 157.8 | 158.2 | 158.6 | 159.0 | 159.4 | 159.8 | 160.2 | 160.6 | 161.0 | 161.4 | 161.8 | 162.2 | 162.6 | 163.0 | 163.4 | 163.8 | 164.2 | 164.6 | 165.0 | 165.4 | 165.8 | 166.2 | 166.6 | 167.0 | 167.4 | 167.8 | 168.2 | 168.6 | 169.0 | 169.4 | 169.8 | 170.2 | 170.6 | 171.0 | 171.4 | 171.8 | 172.2 | 172.6 | 173.0 | 173.4 | 173.8 | 174.2 | 174.6 | 175.0 | 175.4 | 175.8 | 176.2 | 176.6 | 177.0 | 177.4 | 177.8 | 178.2 | 178.6 | 179.0 | 179.4 | 179.8 | 180.2 | 180.6 | 181.0 | 181.4 | 181.8 | 182.2 | 182.6 | 183.0 | 183.4 | 183.8 | 184.2 | 184.6 | 185.0 | 185.4 | 185.8 | 186.2 | 186.6 | 187.0 | 187.4 | 187.8 | 188.2 | 188.6 | 189.0 | 189.4 | 189.8 | 190.2 | 190.6 | 191.0 | 191.4 | 191.8 | 192.2 | 192.6 | 193.0 | 193.4 | 193.8 | 194.2 | 194.6 | 195.0 | 195.4 | 195.8 | 196.2 | 196.6 | 197.0 | 197.4 | 197.8 | 198.2 | 198.6 | 199.0 | 199.4 | 199.8 | 200.2 | 200.6 | 201.0 | 201.4 | 201.8 | 202.2 | 202.6 | 203.0 | 203.4 | 203.8 | 204.2 | 204.6 | 205.0 | 205.4 | 205.8 | 206.2 | 206.6 | 207.0 | 207.4 | 207.8 | 208.2 | 208.6 | 209.0 | 209.4 | 209.8 | 210.2 | 210.6 | 211.0 | 211.4 | 211.8 | 212.2 | 212.6 | 213.0 | 213.4 | 213.8 | 214.2 | 214.6 | 215.0 | 215.4 | 215.8 | 216.2 | 216.6 | 217.0 | 217.4 | 217.8 | 218.2 | 218.6 | 219.0 | 219.4 | 219.8 | 220.2 | 220.6 | 221.0 | 221.4 | 221.8 | 222.2 | 222.6 | 223.0 | 223.4 | 223.8 | 224.2 | 224.6 | 225.0 | 225.4 | 225.8 | 226.2 | 226.6 | 227.0 | 227.4 | 227.8 | 228.2 | 228.6 | 229.0 | 229.4 | 229.8 | 230.2 | 230.6 | 231.0 | 231.4 | 231.8 | 232.2 | 232.6 | 233.0 | 233.4 | 233.8 | 234.2 | 234.6 | 235.0 | 235.4 | 235.8 | 236.2 | 236.6 | 237.0 | 237.4 | 237.8 | 238.2 | 238.6 | 239.0 | 239.4 | 239.8 | 240.2 | 240.6 | 241.0 | 241.4 | 241.8 | 242.2 | 242.6 | 243.0 | 243.4 | 243.8 | 244.2 | 244.6 | 245.0 | 245.4 | 245.8 | 246.2 | 246.6 | 247.0 | 247.4 | 247.8 | 248.2 | 248.6 | 249.0 | 249.4 | 249.8 | 250.2 | 250.6 | 251.0 | 251.4 | 251.8 | 252.2 | 252.6 | 253.0 | 253.4 | 253.8 | 254.2 | 254.6 | 255.0 | 255.4 | 255.8 | 256.2 | 256.6 | 257.0 | 257.4 | 257.8 | 258.2 | 258.6 | 259.0 | 259.4 | 259.8 | 260.2 | 260.6 | 261.0 | 261.4 | 261.8 | 262.2 | 262.6 | 263.0 | 263.4 | 263.8 | 264.2 | 264.6 | 265.0 | 265.4 | 265.8 | 266.2 | 266.6 | 267.0 | 267.4 | 267.8 | 268.2 | 268.6 | 269.0 | 269.4 | 269.8 | 270.2 | 270.6 | 271.0 | 271.4 | 271.8 | 272.2 | 272.6 | 273.0 | 273.4 | 273.8 | 274.2 | 274.6 | 275.0 | 275.4 | 275.8 | 276.2 | 276.6 | 277.0 | 277.4 | 277.8 | 278.2 | 278.6 | 279.0 | 279.4 | 279.8 | 280.2 | 280.6 | 281.0 | 281.4 | 281.8 | 282.2 | 282.6 | 283.0 | 283.4 | 283.8 | 284.2 | 284.6 | 285.0 | 285.4 | 285.8 | 286.2 | 286.6 | 287.0 | 287.4 | 287.8 | 288.2 | 288.6 | 289.0 | 289.4 | 289.8 | 290.2 | 290.6 | 291.0 | 291.4 | 291.8 | 292.2 | 292.6 | 293.0 | 293.4 | 293.8 | 294.2 | 294.6 | 295.0 | 295.4 | 295.8 | 296.2 | 296.6 | 297.0 | 297.4 | 297.8 | 298.2 | 298.6 | 299.0 | 299.4 | 299.8 | 300.2 | 300.6 | 301.0 | 301.4 | 301.8 | 302.2 | 302.6 | 303.0 | 303.4 | 303.8 | 304.2 | 304.6 | 305.0 | 305.4 | 305.8 | 306.2 | 306.6 | 307.0 | 307.4 | 307.8 | 308.2 | 308.6 | 309.0 | 309.4 | 309.8 | 310.2 | 310.6 | 311.0 | 311.4 | 311.8 | 312.2 | 312.6 | 313.0 | 313.4 | 313.8 | 314.2 | 314.6 | 315.0 | 315.4 | 315.8 | 316.2 | 316.6 | 317.0 | 317.4 | 317.8 | 318.2 | 318.6 | 319.0 | 319.4 | 319.8 | 320.2 | 320.6 | 321.0 | 321.4 | 321.8 | 322.2 | 322.6 | 323.0 | 323.4 | 323.8 | 324.2 | 324.6 | 325.0 | 325.4 | 325.8 | 326.2 | 326.6 | 327.0 | 327.4 | 327.8 | 328.2 | 328.6 | 329.0 | 329.4 | 329.8 | 330.2 | 330.6 | 331.0 | 331.4 | 331.8 | 332.2 | 332.6 | 333.0 | 333.4 | 333.8 | 334.2 | 334.6 | 335.0 | 335.4 | 335.8 | 336.2 | 336.6 | 337.0 | 337.4 | 337.8 | 338.2 | 338.6 | 339.0 | 339.4 | 339.8 | 340.2 | 340.6 | 341.0 | 341.4 | 341.8 | 342.2 | 342.6 | 343.0 | 343.4 | 343.8 | 344.2 | 344.6 | 345.0 | 345.4 | 345.8 | 346.2 | 346.6 | 347.0 | 347.4 | 347.8 | 348.2 | 348.6 | 349.0 | 349.4 | 349.8 | 350.2 | 350.6 | 351.0 | 351.4 | 351.8 | 35 |

Electrical Merchandising

The Business Magazine of the Electrical Trade

believes that:

Business belongs to the man who goes after it.

Start Now to "Make This a Radio Summer"

NO OTHER twelve months in the history of radio has such a record of advancement of the art as has the past year. So rapid and so far-reaching have been the achievements of that year, that even the radio-loving public hardly grasps the full meaning of its events. Metropolitan broadcasting stations of tremendously increased power; more large broadcasting stations; re-broadcasting between stations; greatly increased sensitiveness in commercial sets for home operation (enabling Los Angeles to be heard in Maine, on a portable set with antenna concealed inside its box); reduced prices of sets, tubes and auxiliaries—these are some of the latest strides of the art.

Meanwhile an unparalleled opportunity for usefulness is offered radio in the summer ahead, with its two great national conventions, a Presidential campaign, a polar expedition, equipped to report its own progress directly to the world-at-large by radio; and all the usual events of this busy world.

Certainly there need be no summer slump in radio, if every manufacturer, dealer and salesman will do his part to tell the public what the year has accomplished and what the summer offers "on the air."



Sugar-Coating a Bitter Pill

WHAT is to become of the electrical retailer, it is often asked, when hardware stores, music stores, cigar stores and five and ten cent stores rush overnight into the electrical field and take over a large share of business that without these so-called interlopers might go naturally to the out-and-out electrical merchant?

The reason competition makes us uneasy is because our first thought about it is that it is primarily designed to put us out of business. Of course that is not true. But whether it is or not, there is not much we can do about it. Our competitor is there, and it would not be nice to pour vitriol on him.

But the bitter pill has a sugar coating.

Close study of every competitive situation always reveals a reassuring fact or two. Under-populated fields

in industry are seldom prosperous. The public is multitudinous and ubiquitous, with a new generation always pressing at the doors. No one manufacturer or class of dealers can reach more than a few people. Music stores and cigar stores will convert many people to radio who might not be reached by regular dealers for a long time, if at all. Each such store is just another agency at work to help popularize radio. Many sales will receive their initial impulse in these non-electrical stores only to arrive at consummation in the stores of electrical dealers. The man who buys a Ford may next year buy a Cadillac. Such instances outnumber the *vice versas*.

It is absolutely impossible for competition to take more than it gives. There should be abundant consolation in that thought.

What Is the Life of a Washing Machine?

WASHING machine salesmen are often confronted with this question by prospective purchasers, and are sometimes hard put for an answer.

It is difficult to estimate the life of a washing machine because the conditions surrounding each machine in the home of the owner differs widely. Some women take excellent care of their washers, oiling them regularly, keeping them clean and using them regularly.

Other women are not so careful. The machine may not get oiled frequently, sometimes it is allowed to stand out in the weather, sometimes on the back porch, subjected to extreme heat and cold and sun.

But here is the record of one of the careful women. Mrs. Prentiss of Bennington, Vt., bought her washing machine in September, 1922. Since that time she has averaged 28 washings a week. This would average about 1,456 washings a year.

Figuring that the average woman will use her washing machine about 50 times a year, this shows that this machine has already accomplished over 29 years of actual family service.

While washing machines are not sold as commercial laundry equipment, it is quite evident that the washing machine today is built to last for many years.

A Good Reputation Underlies All

THE department manager of an electrical department in one of the well-known household department stores of California told about the early days of his career in his present position. "One of the first things I had done," he said, "was to have printed a written guarantee for all goods sold in this department. I still have the blank forms in my desk—we used not more than a dozen of them. I soon learned that the public had confidence in the name of my firm and that they asked no other guarantee than our reputation."

This is the experience of every contractor-dealer who has really succeeded. It is the unblemished reputation of his firm for good service and fair dealing which is back of his sales. There are always those who are ready to cut prices both on products sold over the counter and on wiring jobs, but the public in the end goes where it can trust the people dealt with, even if it has to pay more. This is the basis for the success of all legitimate business.

Ideas for the Man Who Sells

We wish to compliment you on your up-to-the-minute magazine. The Ideas for the Man Who Sells contained in just one issue are worth the entire subscription price.

*E. M. Nedds,
Sandpoint, Idaho.*

I am writing to tell you that I attribute a great deal of my success in building a very nice electrical business, to the helpful suggestions in your magazine.

*Russell Deyo,
Schoharie, N. Y.*

Lighting Company Donated Free Electricity for Each Appliance Sold by Dealers

BY ROBINSON FARMER

The Electric Show recently staged by the Baton Rouge (La.) Electric League was a great success in every way. Thos. P. Walker, general manager, and J. C. Lamb, commercial manager of the Baton Rouge Electric Company, having observed the electric shows staged at Shreveport, got the various local electrical contractors and dealers together a short time ago and organized the Baton Rouge Electric League.

The officers of the league are J. C. Lamb, president; B. M. Sachse, vice-president; George J. Granger, vice-president; W. C. Joubert, secretary-treasurer.

To stimulate greater interest in the use of electrical appliances and to increase the sales of the electrical contractors and dealers, the Baton Rouge Electric Company gave to the purchasers of each electrical appliance coupons good for the payment of electrical current, on the basis of one-half cent per watt of the rated capacity of each appliance. For example:

| | |
|--|---------------------|
| Iron, regardless of price... | \$2.50 free current |
| Vacuum cleaners | 5.00 |
| Lighting fixtures, floor and table lamps | .50 per socket |
| Sewing machines | 2.50 |
| Electric ironers | 5.00 |
| Refrigerators | 10.00 |

Coupons, in payment for electric current, were, however, limited strictly to home or residential use. They were not transferable or negotiable.

Using Coupon Blotters to Advertise Your Business

The blotter as an advertising medium can be made of greatly increased value by the use of a coupon plan. Have the advertising blotters

made up with a detachable coupon, perhaps in the form of a mailing card addressed to you.

On the back of this blotter coupon, list various kinds of electrical equipment and leave a blank space, or place a little square before each item. Then imprint the blotter with some such message as this: "You are probably interested in one or more of the following items of electrical equipment. Check those in which you feel an interest and mail this card to us and we will send you literature with information about the merchandise."

Coupons Will Bring in Names

This plan will bring in a considerable number of names which will form an excellent mailing list, or a

list which can be worked by personal salesmanship. Another plan would be to offer to present to each person bringing their checked card in person some little souvenir which would be of sufficient interest and value to attract attention. An aluminum dish or utensil makes a souvenir that a housewife is always glad to get.

The blotter is a useful means of general advertising, adapted to keeping your name before the public. Get up a cheap blotter that can be distributed free to school children and that can be placed in all sorts of public offices, such as post office, telegraph office, hotel desk, etc. Have a little better grade, perhaps issued each month with the current month calendar on the back, and distribute these from office to office, thus keeping people always supplied with them.

Such blotters bear only a simple advertisement calculated to remind the user that you are headquarters for everything electrical. This kind of advertising helps to make people think of you when they think of a need for electrical supplies or merchandise or work. Blotter advertising is not an expensive form of publicity, but it is a worth while form when properly handled.

Compares Lamps and Spring Flowers

"Little Lamps in Flower-Like Colorings," is the way the Commonwealth Edison Electric Shops, Chicago, featured lamps to the woman who was planning spring decorating.

"They bring cheery light and springtime decoration to the rooms that you are planning to brighten up for the new season. The odd lamp of quaint or unusual design plays a most important part in the pleasing arrangement of each room. These little lamps, specially priced below

Vibrator's Dose, Not Grandmother's

BANISH "SPRING FEVER" THIS WAY

BETTER than Grandmother's old-fashioned doses is the gentle tap-tap-tap of the vibrator which stimulates the blood to vigorous action, helps to overcome that tired, let-down feeling. And such a glow of rosy, natural color as the vibrator brings! Soothing sleep too, and new vitality. The Arnold Vibrator, complete with six applicators for body, scalp and facial treatments, \$13.75.

COMMONWEALTH EDISON ELECTRIC SHOPS
72 West Adams Street

"The Modern Spring Tonic," said the Commonwealth Edison Electric Shops of Chicago in advertising electric vibrators. "Better than grandmother's old-fashioned doses is the gentle tap-tap-tap of the vibrator which stimulates the blood to vigorous action, helps to overcome that tired, let-down feeling. And such a glow of rosy, natural color as the vibrator brings! Soothing sleep too, and new vitality." The same advertisement was used with the heading: "Banish 'Spring Fever' This Way."

real value, are also suggested for gift giving.

"Lovely little lamps that make you think of spring crocuses and delicate hued flowers in all the soft spring colorings. Some one has said that a lamp is the glowing heart of any room. And indeed a beautiful lamp does bring such cheery light and flowerlike decoration to a room as nothing else can do. Why not brighten up for spring?"

How a Cleaner Is Tested

The story of how Good Housekeeping Institute, New York City, tests the vacuum cleaners that come to it for approval, forms an interesting part of a book entitled, "The Story of Good Housekeeping Institute," just issued by the institute. The testing is described as follows:

"When a vacuum cleaner arrives at the Institute, it is given a preliminary inspection. The crating and packing are examined and the parts and attachments checked.

"The technical tests are next in order. The air displacement of the cleaner is measured by special apparatus. The 'vacuum' is determined by a manometer. In both these tests the power consumption is measured by accurate meters, ammeter, voltmeter and wattmeter, which are part of the Institute's technical equipment. In addition, the speed of the motor is determined and the temperature rise taken after a period of continuous operation.

"The cleaner then passes to the practical testing laboratory where it is put in the hands of women operators who judge its cleaning efficiency and general ease of operation. One test consists of distributing a definite amount, by weight, of flour under a grass rug. The cleaner is then operated over the rug, and the weight of the cleaner bag before and after the test, indicates the ability of the cleaner to take up deeply imbedded dirt. In another test the same weight of flour is evenly distributed over the surface of a fabric rug. By weighing the rug before and after cleaning, the amount of flour which the cleaner removes from the surface can be readily calculated.

"While the machine is under practical test, besides the efficiency of cleaning, operating points, such as the following, are noted: Is the bag easy to remove for cleaning? Is the switch conveniently located? Is the

cleaner comparatively quiet? Are the design and weight of the cleaner such as to make it easy to guide and direct? Does the design make it possible for a woman to lubricate the cleaner readily?

"After all of these tests have been satisfactorily completed, the cleaner is given an engineering inspection. It is completely dismantled and examined for adequacy of parts, materials of construction, workmanship, wear on the parts, effectiveness of lubrication and similar points which have a bearing on the life of the cleaner."

Prize for Naming Home

A feature of the recent ground breaking for the model electrical home at Tacoma, Wash., was the announcement of a contest for the naming of the exhibit when completed. A cash prize of \$50 has been offered to the individual living in southwestern Washington who submits the best name of from three to six words embodying the ideal electrical comfort and convenience to the householder.

The celebration was made a civic affair and was attended by Mayor Fawcett and other city officials, as well as 30 delegates representing the building and allied trades and other business interests.

Putting Even the Spare Tire to Work



Earl Repp, of South Bend, Ind., believes in advertising "To the Ladies" as anyone can guess from the novel use he has made of the extra tires on his car, as pictured above. Everywhere that Earl goes, this vacuum cleaner message goes, too. For effective and economical advertising, it would be difficult to think up a more clever stunt.

How Many Rubs in a Tub Full of Clothes?

BY E. V. PRYOR,

Commercial Manager, Wisconsin Valley Electric Company, Wausau, Wis.

Did you ever stop to consider what wash-day means to the average woman who is still doing up the laundry over the tub?

To many it means drudgery, back-aches, worry, time lost, fatigue, and ultimately broken health.

In a minor way, here is what it means:

One Sheet: Fully 25 rubs down and as many back. Six sheets would take 300 rubs.

One Table Cloth: Also 50 rubs. For three pieces, add 150 rubs.

One Dozen Towels: Cause 300 more rubs.

Six Aprons: 15 rubs each or total of 90 rubs.

Wash Dresses: Will take about 50 more rubs and if only three in the wash, add 150 more rubs.

Above you have a total of approximately 1,000 rubs.

But is that all? Ask those who know and they will tell you that the few garments enumerated above are but a small part of the average family wash.

Then there is the rinsing and wringing—the seemingly never-ending turning of the hand and elbow-power wringer.

Is it any wonder she is all tired out on wash-day? Is it any wonder she dreads the day?

Present these facts to the next husband who imagines that wash-day is an easy job. Quite likely it will open his eyes.

The A. B. C. of Selling

"As Advertised in Your Daily Newspaper"—a Window Display in the Paper's Own Building

Newspapers may object to giving their advertisers editorial "puffs," but there are sometimes more effective methods of co-operation than that. The show window of the Des Moines Register and Tribune was utilized during a recent advertising campaign to display vacuum cleaners. This display may serve as a suggestion to other dealers to tie up with the merchandise department of local newspapers, for this kind of helpful co-operation when advertising, is being used extensively.

Marketing New Lines at a Profit

To me, "Electrical Merchandising" is more than just a magazine. It is an institution which each month is filled with invaluable ideas. I benefit greatly by them. C. O'Connell,
Racine, Wis.

"Electrical Merchandising" is like the telephone directory. The electrical contractor-dealer just can't do without it!

Robert Burke,
Loch Sheldrake, N. Y.

Sure-Fire Prospects for Electric Ventilating Fans

So many and easily found are the possible purchasers of electric window ventilators that the selling of them seems merely a question of making out a list of them, lining up the reasons why they should buy ventilators, and then making a round of visits.

In a drug store, for example, an electric ventilator would relieve employees of a great deal of discomfort and actual danger. The breaking of ammonia flasks, a frequent occurrence in drug stores, ceases to be a dangerous accident when a fan carries off the fumes at once.

Another field is suggested in the recent sale by a New York store of three fans to a music roll company for cooling the room where the records are made.

A ventilating fan was recently sold to a monument company in Chicago. Making monuments is a dusty job. In the sand-blast room a rapid change of air is imperative, a need which a ventilating fan fills with perfect satisfaction. A circular to monument companies is certain to bring inquiries.

Cold storage concerns, also, need ventilators, as was suggested by the recent sale of five blowers to a fisheries company in St. Louis. In cold storage plants it is impossible to get good results without mechanical circulation of the air.

Large churches everywhere offer a big opportunity to the ventilator salesman. The First Methodist Church of Springfield, Ill., is completely ventilated with such fans. There is one in the big auditorium, one in the ladies' parlor, and one in the church dining-room. The theater managers, too, should be approached with a view to installing a fan in the dressing rooms.

Plants of all kinds where plating, buffing or spray painting are done should be sold ventilating fans. Of

all places to work, these seem to be the worst. They are characterized by closed windows, and lack of air circulation and ventilation.

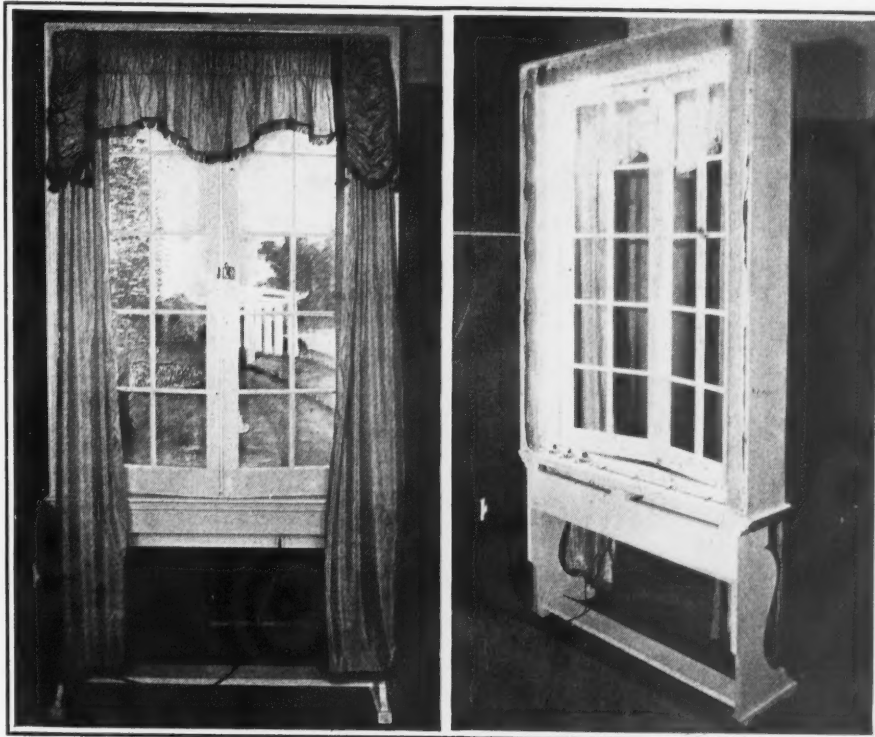
Every dealer who is located in a dairy farm community has an enormous field in the ventilating of farm barns. The farmer is fully as interested in the correct ventilation of his barns as the average business man is of his office or factory. An authority on dairy farming has stated that fresh air is two-thirds of a cow's ration, and the facts in the matter are today being widely distributed through government bulletins, agricultural experiment stations, and farm papers. In the summer, barn power ventilators keep the barns pleasantly comfortable and cool. In cold weather, the ventilators keep the temperature even by drawing out the cold, damp air at the floor and pulling down the warm air to breathing level.

Brighten the Inside Room with a "Sunlight Window"

The "sunlight window"—something new for the electrical man to sell—have you heard of it?

It is not merely "bottled sunshine" now, but the entire window, through which pleasant sunshine comes streaming into the room, and through which one glimpses a blue sky, and hills, and green trees. A room which is really dark and window-less is transformed into a place of airiness and sunshine—almost with the smell of green things outside!

Such is the portable electric window, developed by the Convenolite Company, 231 North Wells Street, Chicago. It is for use in dark, inside rooms, where the appearance of a sunny window will add much to the enjoyment of the occupants. You may know a restaurant where the



No window-less inside room need hereafter give one the feeling of being in a dungeon or vault, with this "sunlight window" in one corner. The picture at the left shows

the lamps concealed in the five-inch trough. Count up the places you know which could use the "sunlight window," and you will be amazed at the market for it.

"sunlight window" would brighten a dark corner or alcove. Office buildings, club houses, industrial plants, stores, studios, apartment houses—all have inside rooms which never see daylight. Without artificial light, they would be dungeons, and even then one has the constant feeling of being in a cellar or back room. All have a real need for the "sunlight window." Every commercial photographer, too, could use one in his studio.

The window is made in two sizes, half and full-length. The depth of the window is five inches, which allows lamps to be concealed behind the sash in a novel form of wiring and reflector trough. Three circuits are provided—one for daylight lamps, corresponding to afternoon light; another for flame-tint lamps, corresponding to morning sunlight; and the third for blue-sprayed lamps, simulating moonlight.

Outdoor Effect

An outdoor scene is painted in colors on a canvas that fits in the back of the window and is illuminated by the lamps. By manipulating the shadows and highlights of the landscape, a very beautiful and realistic effect is obtained, with all the illusions of perspective and distance.

The window is self-contained, and

comes ready to plug into the usual baseboard outlet. Even draperies and valance are not forgotten.

As a show-window attraction, the window was recently used by the Commonwealth Edison Company, Chicago, a snow scene being portrayed on the canvas.

Where They Do More Electric Baking Than in Any City in the World

Salt Lake City, Utah, has more electric bake ovens per capita than any other city in the world. It has more bake ovens in actual number than any city except Chicago, and the population there is 30 times that of Salt Lake City. At the present time the Utah Power and Light Company has 79 bake ovens on its lines, 59 of them in the city itself. These ovens range from a 30-loaf to a 60-loaf capacity. The largest oven will bake 24,000 1-lb. loaves in 24 hours. More than a million kilowatt-hours are used annually for baking on the Utah Power and Light Company's system.

The following daily ration is baked by electric ovens in Salt Lake City: 6,468 loaves of bread; 3,393 dozen rolls; 1,307 cakes; 3,019 pies, and 325 lb. roast meat.

This means that 10,000 men daily

could each enjoy three-quarters of a pound of bread, four rolls, one piece of cake, one and one-half pieces of pie, and one serving of roast meat, all from these electrical ovens.

Users of electric ovens find it to their advantage to "play up" the fact that their products are electrically baked, suggesting as it does the appeal of scientific and up-to-date methods. Progressive bakers readily adapt their methods to the use of continuous baking, by scaling and molding enough dough to load the oven, and while that is baking, working the balance into loaves. Invariably, greatly increased business has resulted to users from the installation of bake ovens.

The Children Show the Way

BY FRANK M. HILTON

I'm always insisting that school children are becoming more and more of a factor in electrical merchandising because they tell mother and mother does the buying. Items like this always to me indicate a spreading habit:

The domestic science department is now equipped with an electric ice cream freezer. The old system of having boys freeze the ice cream for luncheon is abolished, and the new device has been received with great commendation by the school.

From an up-to-date school in some metropolitan suburb? Not exactly. It's the Kauai High School at Lihue, Kauai, where the movie fan would expect only to find ukuleles, grass skirts and such edibles as can be knocked down ready-to-serve from the waving palms!

What One "Liner" Ad Did

In order to sell a vacuum cleaner, John Weinhart of the Electric Housekeeping Shop, Pontiac, Mich., recently had to buy from his customer her old, small-size vacuum cleaner. This left him with a second-hand cleaner on his hands. Next day he inserted a "liner" ad in the "For Sale-Furniture" department of his local newspaper, offering a "Baby Grand Vacuum Cleaner." The one ad brought 21 telephone calls and the sale of the cleaner within 24 hours. The other 20 calls gave Mr. Weinhart names and addresses of 20 other women who wanted vacuum cleaners. He immediately followed up the leads with splendid results.



The electric ovens in the Keeley Ice Cream Company's bakery, one of the 59 electrically operated baking installations in Salt Lake City. They have three ovens and one electric range, with a total connected load of 36 kw.

Lighting Equipment Sales Methods

A lady came into our store the other day intending to buy two Mazda lamps. A copy of "Electrical Merchandising" lay on the counter, open at a page in the lighting fixture advertising section. An illustration caught her eye. She turned a few pages each way, returned to the illustration which pleased her, and said,

"Can you get that fixture for me?" We not only sold her that fixture, but several others. After she had gone, we figured that our net profit on the sale would pay for "Electrical Merchandising" for eighteen years. We're going to keep the latest copy handy, hereafter. L. L. Luther,

Pulaski, N. Y.

Why the Dealer Should Push Glassware

BY ROBERT ZANNOTH

The Notting Company, Detroit, Mich.

1. Glass shades can be controlled to greater degree than others by the lighting-equipment dealer.

2. Glass shades can be made in larger variety of forms than can other materials.

3. Glass has more possibilities for decoration than any other material.

4. Glass shades have more luminosity than shades made of other materials.

5. Glass shades with straight-side lamps are more satisfactory to customers from a lighting standpoint than are shades of other materials, and far more satisfactory than unshaded ball lamps.

6. Central stations will welcome use of glass shades instead of ball lamps, because their load will be increased.

7. Manufacturers of lamps would rather make a more satisfactory article than ball lamps.

8. Even ball lamps should be shaded; bare light hurts the eyes.

9. It is possible to add more dignity to good fixtures by displaying them with suitable shades.

10. It is more profitable to sell glass shades than ball lamps.

11. As long as we sell only metal and not atmosphere, we are not getting the most out of our business.

12. Former distribution conditions regarding glass do not obtain. Glass can be purchased in small quantities and one can get prompt deliveries, insuring quick turnover.

13. Customer can afford to buy good shades for straight side lamps; round ball lamp replacements will cost him a lot more.

14. Customer can't bring shade

back and say "it was burned out" when he got it.

15. No one would think of using a portable lamp without a shade.

16. I can remember the time when we sold \$10 worth of glass on a 5-light fixture. Now we sell \$2.75 worth of bare lamps.

Many Have Lamps but Few are Well-Lighted

BY ROBERT S. MERRILL

"Oh, he's got a book." Perhaps you recall that joke about the gift-purchaser who offered that reply when it was suggested her friend might like a book. Store-keepers may think they have lights and con-

sequently are not logical prospects for lighting fixtures but the lighting division of the Commonwealth Edison Company of Chicago makes them question themselves with such advertising as:

ONLY 3 STORES IN 10 ARE WELL-LIGHTED!

What does "well-lighted" mean? A lot of stores use high-wattage lamps and spend ample money for electricity but get only a glary brilliance, neither attractive to trade nor restful to customers. Good lighting is diffused illumination, radiant and pleasing, never brilliant or flashy. It usually costs less. It seldom costs more—it always increases business. Get expert advice on this. It's worth it.

This is part of an advertisement offering a certain type of light to merchants on easy payments. An-

Indoor Cottage Feature of Fixture Salesroom



The Robin Lighting Fixture Company, 47 Warren Street, New York City, shows fixtures in attractively finished and arranged rooms. These handsome settings

are a great help in speeding up sales. The rooms are separated from store and office by a facade resembling the exterior of a pretty cottage.

other advertisement along the same line told how a local outlying department store relied on lighting fixtures alone to increase sales and improved business 25 per cent. An illustration of the store interior, with the type of fixtures featured was accompanied by:

"Tests recently completed at New Grand Leader Store, 2740 West Twenty-second Street, Chicago, show cash results of better lighting.

"Here it is—proved for you! Better lighting does increase business. We have recently completed a thorough and unbiased test at the New Grand Leader department store, installing Victory fixtures as shown in the picture. No extra advertising was done, no cut price sales conducted, no unusual window trims installed. The lighting alone was relied on to increase trade—and it made good!

"Joseph R. Vlcek, president of the New Grand Leader Company ordered 54 Victory fixtures permanently installed on the two floors of his store, which work has since been completed. Trade continues excellent.

"Ask our lighting engineers how many new fixtures it will require to increase your trade 25 per cent. An estimate places you under no obligation."

In keeping with such advertising as this to business men, the Commonwealth Company from time to time features its maintenance department, using illustrations of maintenance men atop ladders giving lamps needed attention. Copy like this was used:

DIRT ABSORBS LIGHT—WASTES MONEY

Dirt on electric lamps, shades and

reflectors absorbs as much as 40 per cent of the light. Are you losing 40 per cent of the current you pay for? Are you paying for light you never see?

Our monthly maintenance service keeps your lighting equipment 100 per cent efficient and relieves you of all this responsibility. We clean store, office and factory fixtures and renew burned out lamps regularly, every thirty days. The small monthly service charge is based on number and kind of fixtures cared for. A 'phone call brings a man to give an estimate.

Selling Lamps by Demonstration and by Phone

J. E. Nestor who recently opened a new electrical store in Montclair, N. J., under the name "Electrical Merchandise, Inc.," was approached by a garage man who complained of his inability to get a lamp that was rugged enough for use on the drop cord which he used when working under and around automobile motors. For answer, Mr. Nestor took a mill-type lamp, which he first subjected to considerable abuse with his hands and then screwed it into a test socket to show that it was undamaged.

The prospect was impressed by this test, but still somewhat skeptical of the lamp's ability to withstand constant hard usage. Mr. Nestor then put the lamp in the cylinder of an electric washing machine, turned on the current and after the lamp had been knocked about for

Why Sixty Merchants Say, "Good Lighting Pays"

Sixty merchants were asked this question by representation of the Cleveland Electrical League—"What has better lighting done for you?" Their answers, reduced to simplest form, are as follows:

1—Better lighting adds attractiveness and value to even the best of merchandise.

2—Better lighting shows the true value of merchandise, thus reducing the returned goods problem.

3—Better lighting creates an atmosphere of cheerfulness which affects customers and clerks alike.

4—Better lighting saves rent by enabling a store located in the middle of the block to compete with the corner store.

5—Better lighting instantly creates an atmosphere of clean lines, neatness and up-to-dateness.

6—Better lighting makes it possible to use every foot of floor space and eliminates dingy corners.

7—Better lighting doubles the attraction and sales power of display windows.

8—Better lighting overcomes competition by attracting trade from the poorly lighted stores.

9—Better lighting pays for itself many times over through the increased sales produced by it, for well-lighted merchandise is already half sold.

10—Better lighting can bring out the true color and texture of materials, thus eliminating errors in matching goods.

An Arrangement That Helps the Sale of Fixtures



This is a view of the fixture department of the Appel-Higley Electric Company, Dubuque, Iowa. It shows some excellent ideas for the handling of such goods. The stock is attached to a strip of false ceiling which is about three feet lower than the main one. This brings all fixtures down

within easy range of the customer's vision and does away with the uncomfortable craning of necks when goods are being shown, which is a distinct help to the salesman. Also this arrangement of false ceiling simplifies the making of connections for appliances.

several minutes again screwed it into the socket. It burned.

Mr. Nestor recently had his clerk call a large list of prospects on the telephone:

"Good morning, Mrs. Jones! This is the manager of the Electrical Merchandise Shop speaking.

"We find that at this season one is frequently in need of a few incandescent lamps for the home and, in order to acquaint you with our service, we will be very glad to deliver to you this afternoon any quantity you may need, even one. Of course the economical and safe way is to buy by the carton.

"Can we be of service to you?"

In case no order was secured, the clerk terminated the conversation by saying: "We would appreciate your remembering us at some future time."

Sales Helps for Electrical Dealers

We would like to express our appreciation of the service that is being rendered by "Electrical Merchandising." In our minds there is not a paper or a magazine that can even compare with it.

It is worth its weight in gold. It is one of the things that always occupies a place on the writer's desk.

George E. B. Gringer,
Gringer Electric Company
Guelph, Ontario, Can.

Plan Out a Schedule for Using Manufacturer's Sales-Help Material

If a newspaper publisher in your city were to come to you and say that he would be glad to give you 10 inches of advertising space free in each issue of his paper just to help along your business and to give prestige to his paper, you wouldn't turn down such a proposition, would you? Especially if he agreed, in addition, to write up your advertisements in fine style.

Well, there is a standing offer always before you of something almost as good as that. The manufacturers of the various leading lines sold in your store are prepared nearly all the time to supply you with the highest type of advertising matter in the form of booklets, folders, cards, and other sorts of printed matter. This advertising is prepared by high grade experts in publicity work. It is finely printed and it will bear your name, either in imprint or

in your own rubber stamp impression.

Why don't you go at it to use this advertising matter systematically? Write to the manufacturers and find out what they have that you can use. Check up your mailing or house-to-house distribution and find what number of pieces of matter it takes to go around. Then arrange to get such quantities of the matter as you can use, not more to be wasted.

Develop a plan that will involve sending out one piece of matter each week for a definite period, perhaps three months. Follow this plan up and so get people to thinking about you and your business. Keep them reminded of you and at the same time present to them influential advertising for the lines of merchandise and supplies you like best to sell.

There will be some work connected with this advertising. If the matter is mailed, there will be postage bills, but if you get the advertising matter of high class without cost, you can

Helping the Waiting Customer "Sell Herself"



Watch how the drug stores do it, if you want to increase the turnover of your smaller items. Notice how they put things out on the counter, within reach of the customer's eyes and hands, and give each little item a display space all its own. An article like the toggle switch, for example, needs the help of some such display device as that shown above, supplied its dealers by the Connecticut Electric Mfg. Company, Bridgeport, Conn. The body of the toggle switch with plate attached is simply inserted into a space in the display card, and the customer thus can actually push the switch up and down.

Your Spring House Cleaning Campaign Needs These "Dealer Helps"



The number of vacuum cleaners you sell this spring will depend mainly on the thoroughness with which you develop your "spring housecleaning" campaign. For example, the P. A. Geier Company, of Cleveland, O., in offering its dealers its 1924 spring cleaning campaign material, points out that these "dealer helps" cover every

phase of such a campaign. Mailing of circulars and handbills, newspaper ads and special window display material consistently tell the story of the vacuum cleaner's services during spring cleaning week. The window streamers shown above are printed in brilliant colors and give the snappy touch that is needed.

well afford to pay the postage. Put on a campaign along this line and watch the results accumulate. You will quickly get a reputation for running a high class store.

The Johns-Pratt Company, Hartford, Conn., announces a new catalog on its universal service switches, featuring the fact that this service system combines in one enclosed unit all the functions of a service entrance switch and cutout block with facilities for meter connection and testing, service maintenance and control, and complete safety enclosure of all elements of the installation.

The Hart & Hegeman Mfg. Company, Hartford, Conn., announces that its 1924 general catalog is now ready for distribution.

New Merchandise to Sell and Where to Buy It

I find your department "New Merchandise to Sell and Where to Buy It," a wonderful aid to the live electrical man. More power to you.

C. W. Murphy,
Kankakee, Ill.

We read "Electrical Merchandising" probably more than any other magazine that I receive. Nuff sed! It's a dandy paper.

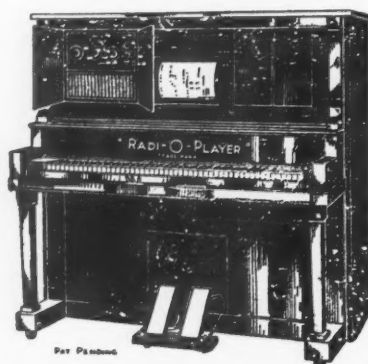
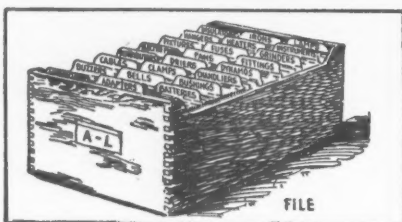
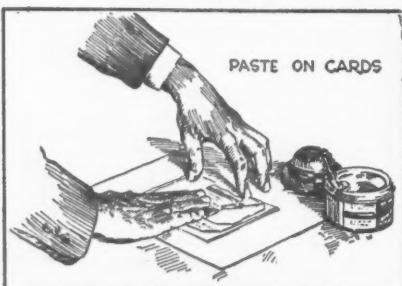
Eardley Electric Company,
Salt Lake City, Utah.

For Your Further Information—We Are Now Including "Intended Selling Prices" of New Products

In response to suggestions from readers that the usefulness and service of this department "New Merchandise to Sell" would be further enhanced if we included prices with our descriptions of new products, *Electrical Merchandising* with this issue begins the publishing of "intended retail selling prices" of articles, where such information is available. The intended retail selling price given in each instance is the price at which it is expected the article can be sold to the retail purchaser, after the customary distribution costs have been allowed for.

In no case, of course, is the figure given to be taken as setting a price at which the product must or should be sold by the retailer. Instead, the prices set down on this and the following pages, are given merely for the convenience of our merchant-readers—to afford them approximate figures by which to gage roughly the probable market with their own respective clientele for the various new devices which are here described as an editorial news service.

How to Use and File These Items



Radio Set Installed in Player Piano

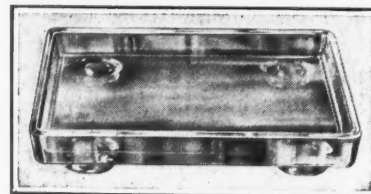
Electrical Merchandising, April, 1924

One may have the player piano's music and the daily radio program at the same time—if desired—for the type "R-P" player piano made by the Weydig Piano Corporation, One hundred and Thirty-third Street and Brown Place, New York City, has a built-in radio set installed in its left-hand compartment, as illustrated. The set has the neutrodyne circuit and requires only four vacuum tubes, giving two stages of tuned radio frequency amplification, detector and two stages of audio frequency amplification.

Battery Tray

Electrical Merchandising, April, 1924

In homes where radio outfits are installed, rugs and carpets may be protected from the injurious effects of battery acids by the use of a new "Tuf-glas" battery tray brought out by Russell B. Cressman, 200 Fifth Avenue, New York City. The tray's inside measurements are 8½x9½ in. and it is made of acid-proof glass. Placed underneath the radio battery, it is designed to protect the house furnishings from the acids.



Recording Device for Radio Dial Settings

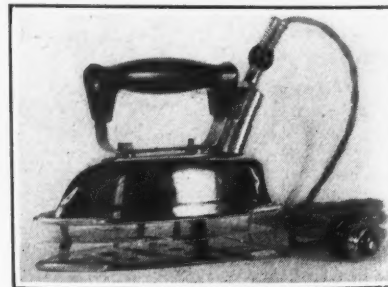
Electrical Merchandising, April, 1924

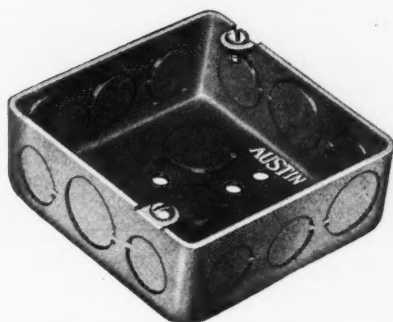
"Radiolog"—as its name implies—is the log or record of the radio set. It is a simple and convenient device for recording the dial settings for the different broadcasting stations, making it an easy matter to tune in any desired station when the setting has once been logged. The manufacturer is the Radiolog Company, 511 Market Street, Camden, N. J. Intended price, \$2.

Electric Iron with Bakelite Handle

Electrical Merchandising, April, 1924

The Simplex 6-lb. iron, manufactured by the Simplex Electric Heating Company, 85 Sidney Street, Cambridge, Mass., is now being made with a bakelite handle so constructed as to prevent accidental contact with the heated portion. The handle is finished in bright green and the unbreakable all-steel plug, which is now the regular equipment of Simplex irons, has a green ball grip. The attachment plug is also finished in green and the cord is gray and green. Listed at \$5.75.





Outlet Box

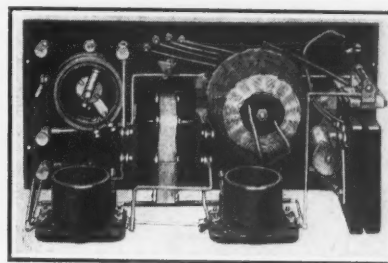
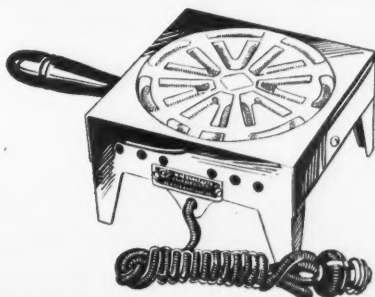
Electrical Merchandising, April, 1924

To meet the requirements of contractors who have in the past been forced to ream out $\frac{1}{2}$ -in. knockouts to take $\frac{1}{2}$ -in. conduit, the M. B. Austin Company, 108 South Desplaines Street, Chicago, has brought out a new No. 300 outlet box which is 4 in. square, $1\frac{1}{2}$ in. deep, with combination of $\frac{1}{2}$ -in. and $\frac{3}{4}$ -in. knockouts. The box has two $\frac{1}{2}$ -in. and one $\frac{3}{4}$ -in. knockouts in each side while the bottom has three $\frac{1}{2}$ -in. knockouts and two $\frac{3}{4}$ -in., so arranged to meet all practical needs.

Hotplate

Electrical Merchandising, April, 1924

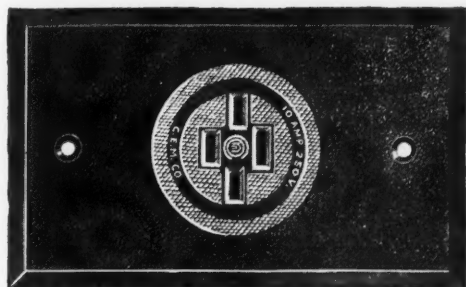
The Dominion Electric Manufacturing Company, Minneapolis, Minn., is manufacturing a new No. 61 hotplate which is 6 $\frac{1}{2}$ in. square by 3 $\frac{1}{2}$ in. deep and has brick heating element 6 in. in diameter, 660 watts. The hotplate is nickel finished and has black enameled detachable handle. Its list price is \$3.85.



Two-Tube Regenerative Receiver

Electrical Merchandising, April, 1924

The new Model 51 receiver brought out by the Crosley Radio Corporation, 37 Alfred Street, Cincinnati, Ohio, uses the Armstrong regenerative and detector circuit with one stage of audio frequency amplification but a two-step audio frequency amplifier may be used in connection with this set, if desired. One multistat takes care of both filament voltages in the two tubes. Provision is made for a "C" battery and a grid leak if the owner wishes to use them. Intended retail price, \$18.50.



Receptacle

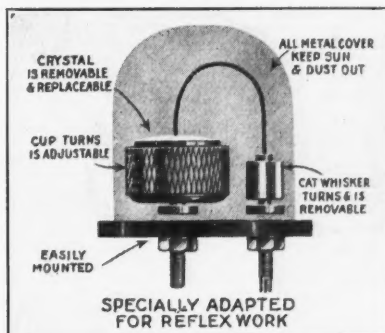
Electrical Merchandising, April, 1924

The standard finish of the unit receptacle made by the Connecticut Electric Manufacturing Company, Bridgeport, Conn., is a rich brown color, designed to harmonize with all furniture and wall decorations, but a wide range of colors is available in case special finishes are required. The receptacle is made of bakelite, and the standard finish was selected to eliminate tarnish and ugly marks on walls from the continual polishing of the ordinary type plates.

Detector

Electrical Merchandising, April, 1924

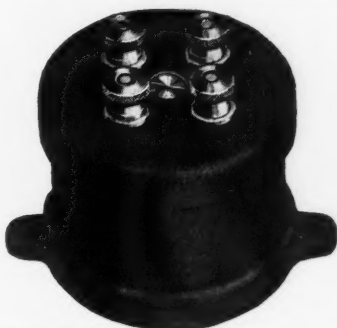
Directions accompanying the fixed adjustable detector made by the Lincoln Radio Company, 115 East Eleventh Street, Los Angeles, Cal., read as follows: "Lift the cover and lower the cat whisker support, so cat whisker touches crystal. Turn cat whisker support, or the crystal cup, until the sound in receiver is loudest and clearest; place cover back, and the detector is fixed." About \$2.



Washing Machine

Electrical Merchandising, April, 1924

With the improved turning arrangement of the cups of the Aerobell clothes washer, made by the Foote-Burt Company, Cleveland, Ohio, the up and down movement of the cups is held vertical and the turning is accomplished at the top of each stroke. Other features of the machine are the reversible drain board, automatic safety switch, non-tarnishable cups and end-mounted motor.



Audio Frequency Transformer

Electrical Merchandising, April, 1924

The "Ironclad" transformer made by the Eldredge Electric Manufacturing Company, Springfield, Mass., is designed for use in any position, upside down, side by side or one on top of the other. The top and base are made of bakelite with knurled inserts to provide rigidity. The shield is one continuous strip of seven complete turns of unique construction. Ratio, 6 to 1. Listed at \$5.

Lighting Glassware with Lamp-Compensating Qualities

Electrical Merchandising, April, 1924

"Don't cheat yourself by using electric lamp bulbs after they have outlived their useful life," says the Gleason-Tiebout Glass Company, 200 Fifth Avenue, New York City. By turning dark or yellow the "Celestialite" glass made by this company is designed to indicate when a change in lamps is required. This change in color is brought about, the company explains, by means of an inner blue layer which modifies the excess red and yellow rays thrown off in increasing quantities as the lamp ages.

Automobile Headlight

Electrical Merchandising, April, 1924

By the combination of an ingenious reflector and amber screen in the E & J Type 20 headlight, light rays are projected through a double convex lens casting a strong, white light for a distance of 500 ft., but approaching motorists see only a soft amber glow. The source of light is a 21 cp. gas-filled bulb. In the middle of the lamp, between the reflector and the lens, is a semi-circular amber glass reflector. The elliptical reflector directs the light radiating from the lamp in such a way that the amber filter cuts the ray at the apex of its greatest intensity, throwing the most intense light straight ahead, while the rays reflected upward are filtered through the colored glass, thereby removing its violet rays and glare as well as the necessity for dimming of lights. The list price of the lamps is \$50 per pair. Edmunds & Jones Corporation, Detroit, Mich.



Continued on third and fourth pages following, for your convenience in clipping and filing.
Each item will fit a 3 x 5 in. standard filing card.

You Need This Vacuum Cleaner Sales Manual



WHAT DOES SPRING MEAN TO YOU?

Does it mean a season of buds and birds, of clean breezes and light hearts, of hours spent in the pure enjoyment of living?

Or is Spring a work season between Winter and Summer when the thought of housecleaning drives all joy from your heart?

You can make yours a joyous Spring!

An Electric Cleaner holds the secret. It's a tireless little helper that keeps your home bright in a most business like way.

Electric Cleaners from
\$00.00 to \$00.00

Easy terms if you wish

(Your Name and Address)

All that your sales people need to know about demonstrating and selling vacuum cleaners, is contained in the new manual entitled "Sales Helps on Electric Cleaners," just issued by the Society for Electrical Development, New York City. Suggestions for demonstrations in the prospect's home and in the store demonstrations, and the important subject of window demonstrations are included in the booklet. For the dealer himself there are numerous sales-letter and newspaper-ad suggestions, of which the above is typical. Altogether, the manual is the most complete of its kind ever issued.

Even Lamps Must Be Sold— and Here's a Counter Device to Help You Sell 'Em

Do lamps need to be sold, or do they sell themselves? Well—how many of your neighbors, in your observation, put off the task of buying lamps until they are down to one bulb for each room, and can't shift them about any longer without leaving one room in total darkness?

Yes, even lamps must be sold, and to insure a quick turnover on lamps for its dealers, the Consolidated Electric Lamp Company, Danvers, Mass., is supplying its dealers with an effective counter lamp demonstrator. It is a box-like counter display, made of highly finished metal, and holding eight lamps. Plugged in at the nearest socket, it enables the dealer not only to keep an attractive lamp display always before the eyes of his

customers, but to quickly test and demonstrate different sizes and types of lamps.

At the end of each demonstrating-box is a "split plug" which will allow the merchant to insert a lamp into this socket and demonstrate its bril-

liance without having to screw it in.

The Galvin Electric Manufacturing Company, St. Louis, Mo., announces the issue of a new catalog covering its line of fractional horsepower motors from $\frac{1}{16}$ to $\frac{1}{2}$ hp. inclusive, repulsion induction motors from $\frac{1}{4}$ to $\frac{1}{2}$ hp. and two and three phase motors from $\frac{1}{4}$ to 1 hp.

Record of Lighting Fixture Patents

Issued from Feb. 5 to Feb. 26, 1924

Compiled by NORMAN MACBETH

Consulting Illuminating Engineer, New York City

Design Patents

The following are all the design patents pertaining to lighting materials issued by the U. S. Patent Office, from Feb. 5, 1924 to Feb. 26, 1924.

63,878, 63,879. **Electric Chandelier.** Abraham Cooper, Brooklyn, N. Y. Filed May 18, 1923. Issued Feb. 5, 1924. Term three and one-half years.

63,886, 63,887. **Lamp Globe.** Adolph F. Dickerson, Schenectady, N. Y., assignor to General Electric Company. Filed Oct. 3, 1923. Issued Feb. 5, 1924. Term fourteen years.

63,902. **Combined Lamp Stand & Clock.** Stephen Kronburger, Hoboken, N. J., assignor to Melita White Metal Casting Company, New York, N. Y. Filed April 7, 1923. Issued Feb. 5, 1924. Term three and one-half years.

63,921, 63,922. **Two-Light Arm for Lighting Fixtures, Ring for Lighting Fixtures.** Ernest A. Walker, Newark, N. J. Filed Nov. 6, 1923. Issued Feb. 5, 1924. Term seven years.

63,934. **Arm for Lighting Fixtures.** Abraham Cooper, Brooklyn, N. Y. Filed March 16, 1923. Issued Feb. 12, 1924. Term three and one-half years.

63,943. **Lighting Fixture.** Wilfred B. Goddard, San Francisco, Calif. Filed Dec. 6, 1923. Issued Feb. 12, 1924. Term three and one-half years.

63,944. **Light Fixture.** Joseph W. Gosling, Schenectady, N. Y., assignor to General Electric Company. Filed May 11, 1923. Issued Feb. 12, 1924. Term fourteen years.

63,962, 63,963. **Electric Canopy, Electric-Socket Cover.** Frederick Max Poritz, New York, N. Y., assignor to Star Chandelier Company, Inc., New York, N. Y. Filed Oct. 12, 1923. Issued Feb. 12, 1924. Term three and one-half years.

63,977. **Lamp Shade.** Elmer L. Snyder, Sioux City, Iowa. Filed March 26, 1923. Issued Feb. 12, 1924. Term three and one-half years.

63,981. **Lighting-Fixture Unit.** Albert Ullman, Cleveland, Ohio, assignor to The Scott-Ullman Company, Cleveland, Ohio. Filed March 5, 1923. Issued Feb. 12, 1924. Term three and one-half years.

63,985, 63,986, 63,987. **Bracket Back, Loop, Canopy Ring for Lighting Fixtures.** Ernest A. Walker, Newark, N. J., assignor to The G. & G. Fixture Company, Newark, N. J. Filed Nov. 6, 1923. Issued Feb. 12, 1924. Term seven years.

63,990. **Band for Chandelier Fixtures.** Frank Yokel, Avalon, Pa., assignor to Pittsburgh Lamp, Brass & Glass Co., Pittsburgh, Pa. Filed Sept. 25, 1923. Issued Feb. 12, 1924. Term seven years.

64,024. **Lighting-Fixture Tassel.** Joseph Miller, New York, N. Y. Filed Oct. 25, 1923. Issued Feb. 19, 1924. Term three and one-half years.

64,031. **Shade Support.** Edward C. Ruttenberg, Chicago, Ill. Filed Feb. 3, 1923. Issued Feb. 19, 1924. Term three and one-half years.

64,035. **Combined Lamp Shade & Stand.** Ray Walter Thompson, New York, N. Y. Filed March 9, 1922. Issued Feb. 19, 1924. Term seven years.

64,036. **Arm for Lighting Fixtures.** Ernest A. Walker, Newark, N. J., assignor to The G. & G. Fixture Company, Newark, N. J. Filed Nov. 6, 1923. Issued Feb. 19, 1924. Term seven years.

64,037. **Plate for Lighting Fixtures.** Lester R. Wellman, Chicago, Ill., assignor to Friedley Voshardt Company, Chicago, Ill. Filed Sept. 14, 1923. Issued Feb. 19, 1924. Term seven years.

64,064. **Lamp.** Henry A. Hansen & Roy W. Hansen, Chicago, Ill. Filed Dec. 19, 1921. Issued Feb. 26, 1924. Term 14 years.

64,065. **Combination Lamp & Phonograph Stand.** Henry A. Hansen & Roy W. Hansen,

Chicago, Ill. Filed Sept. 22, 1921. Issued Feb. 26, 1924. Term fourteen years.

64,066. **Lamp Phonograph.** Henry A. Hansen & Roy W. Hansen, Chicago, Ill. Filed Feb. 13, 1922. Issued Feb. 26, 1924. Term seven years.

64,075-76-77-78. **Ring Body, Back Plate for Lamp Fixtures.** Albert J. D. Ohm, Astoria, N. Y., assignor to Lion Electric Manufacturing Company, Inc. Filed Oct. 20, 1923. Issued Feb. 26, 1924. Term three and one-half years.

64,079. **Chandelier Body.** Frederick Max Poritz, New York, N. Y., assignor to Star Chandelier Company, Inc., New York, N. Y. Filed Oct. 12, 1923. Issued Feb. 26, 1924. Term three and one-half years.

64,087-88-89-90. **Lighting Fixture.** Edgar A. Wangersheim, Chicago, Ill. Filed Oct. 5, 1923. Issued Feb. 26, 1924. Term three and one-half years.

64,096-97-98-99-100-101-102. **Wall Plate, Bracket, Hanger, Plate for Chandelier Fixtures.** Frank Yokel, Avalon, Pa., assignor to Pittsburgh Lamp, Brass & Glass Company, Pittsburgh, Pa. Filed Sept. 25, 1923. Issued Feb. 26, 1924. Term seven years.

Mechanical Patents

1,482,580. **Shade-Supporting Means.** Eben F. Oliver, Jersey City, N. J., assignor to Korrectolite Company, Inc., New York, N. Y. Filed Nov. 23, 1922. Issued Feb. 5, 1924.

1,483,162. **Mechanical Movement.** Victor R. Despard, Hinsdale, Ill., assignor to McGill Mfg. Company, Valparaiso, Ind. Filed Sept. 19, 1919. Issued Feb. 12, 1924.

1,483,173. **Switch-Operating Apparatus.** David D. Gordon, Chicago, Ill., assignor, by mesne assignments, to McGill Mfg. Company, Valparaiso, Ind. Filed April 20, 1918. Issued Feb. 12, 1924.

1,483,252. **Detachable Electric Fixture.** Whitman Symmes, San Francisco, Calif. Filed Nov. 8, 1921. Issued Feb. 12, 1924.

1,483,264. **Shade Holder.** Lauritz W. Andersen, Waterbury, Conn. Filed Feb. 6, 1922. Issued Feb. 12, 1924.

1,483,306. **Adjustable Reflector for Lamps and the Like.** Axel Theodor Julin & Olof Einar Froding, Eskilstuna, Sweden, assignors to Aktiebolaget Separator, Stockholm, Sweden. Filed April 21, 1922. Issued Feb. 12, 1924.

1,483,355. **Lamp.** Alexander B. Kupsche, Chicago, Ill. Filed March 30, 1922. Issued Feb. 12, 1924.

1,483,417. **Lighting Fixture.** Leroy C. Doane, Cleveland, Ohio, assignor to General Electric Company. Filed Sept. 8, 1920. Issued Feb. 12, 1924.

1,483,588. **Electric Light Stand Adjuster.** Anthony Meyers & Harry Simmons, New York, N. Y. Filed Jan. 13, 1923. Issued Feb. 12, 1924.

1,483,716. **Electric-Lamp Globe.** Bruno B. Choiniski, Milwaukee, Wis., assignor of forty-nine one-hundredths to Stanley A. Lange, Milwaukee, Wis. Filed April 6, 1921. Issued Feb. 12, 1924.

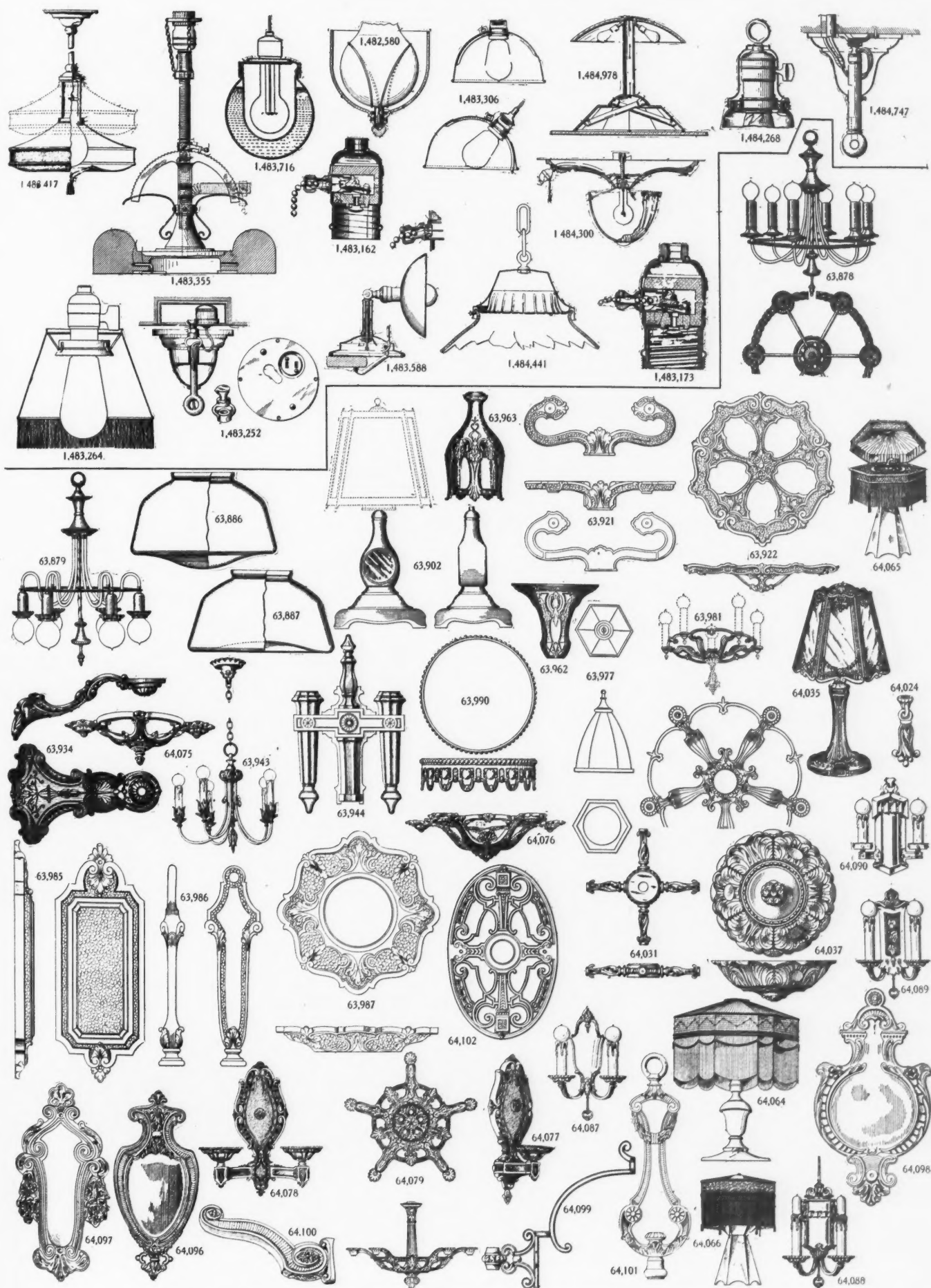
1,484,268. **Lamp-Shade Support.** Frank J. Lieske, Detroit, Mich. Filed March 17, 1922. Issued Feb. 19, 1924.

1,484,300. **Electric-Light Fixture.** Percy I. Elias & Michael Angelo Elias, 2d, New York, N. Y. Filed Jan. 15, 1921. Issued Feb. 19, 1924.

1,484,441. **Lighting Fixture.** Frederick W. Wakefield, Vermilion, Ohio, assignor to The F. W. Wakefield Brass Company, Vermilion, Ohio. Filed June 28, 1923. Issued Feb. 19, 1924.

1,484,747. **Lighting-Fixture Stem.** James Williamson, Chicago, Ill., assignor to R. Williamson & Company, Chicago, Ill. Filed July 28, 1922. Issued Feb. 26, 1924.

1,484,978. **Lamp Stand for Show Cases.** Frederic L. Wheeler, Berkeley, Calif. Filed Dec. 26, 1922. Issued Feb. 26, 1924.



Copies of illustrations and specifications for patents may be obtained from the Commissioner of Patents, Washington, D. C., for 10 cents each



New Merchandise to Sell

(Continued from third page preceding)

Radio Loudspeaker

Electrical Merchandising, April, 1924

Two new models of the Magnavox radio reproducer have been announced by the Magnavox Company of Oakland, Cal., and 370 Seventh Avenue, New York City. The new instruments, R2 and R3, involve a new volume control, enabling the units to be operated on any point between a minimum current consumption of 0.1 amp. and a maximum of 0.6 amp. when supplied with six volts. The R3, with 14-in. convex horn is made to sell for \$35 while the R2, with 18-in. horn, is listed at \$50.



Volt-Ammeter

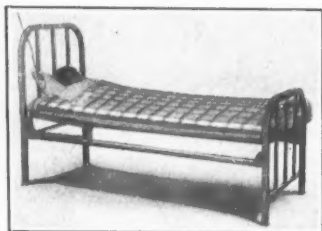
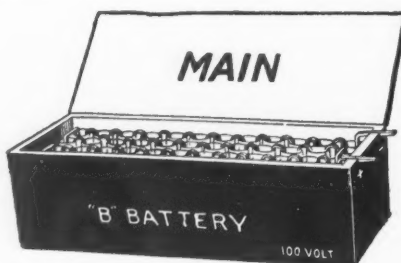
Electrical Merchandising, April, 1924

An ammeter and voltmeter are combined in one instrument in the volt-ammeter recently brought out by the Eldredge Electric Manufacturing Company, Springfield, Mass. This combination instrument is specially designed for use by railroads, telegraph and telephone companies, mines and wherever readings in either amperes or volts are desired with one instrument. It operates on either alternating or direct current, indicating in either direction of the current and is made to give instant reading regardless of polarity of terminals.

Radio "B" Battery

Electrical Merchandising, April, 1924

The plates of the new radio "B" storage battery made by the Main Electric Company, Cleveland, Ohio, are cast in pairs to one strap to prevent burned-out connections and the accompanying noise in the batteries. The "Main" is built in units of 48 cells, 100 volts in one cabinet, as illustrated.



Electric Blanket

Electrical Merchandising, April, 1924

Among the electrical therapeutic equipment made by the Whitney Company, 143 Liberty Street, New York City, is an electric blanket, designed to serve as a hot pack. It operates from the ordinary light socket and its intended selling price is \$72.

10-In. Fan

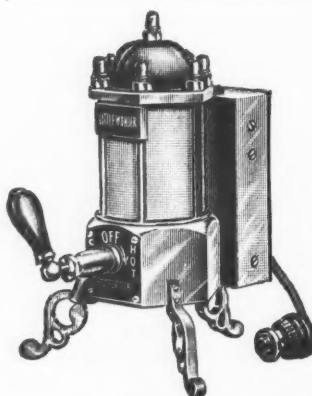
Electrical Merchandising, April, 1924

Another new fan for the summer trade is announced by the Galvin Electric Manufacturing Company, 3316 South Broadway, St. Louis, Mo. It is of the induction type, non-oscillating, has 10-in. polished brass blade, 8-spoke guard, stop-and-start feed-through switch and 10-ft. cord with separable plug. The finish is black enamel.

Water Heater

Electrical Merchandising, April, 1924

The "Little Wonder" electric water heater is described by its manufacturer, the National Electric Water Heater Corporation, Forty-second Street and Broadway, New York City, as a device which can be attached to the ordinary cold water pipe by simply making the connection and screwing the heater on to the cold water pipe or it can be moved to any room desired and attached to the faucet by a rubber hose, making it either stationary or portable. It is made for 110 volts, a.c. or d.c. Its weight is 10 lbs., height 12 in. and it has three removable legs that can be taken off when adjusted to the water pipe. The capacity of water per hour is approximately 22 gal.



Offset Barhanger with Stud

Electrical Merchandising, April, 1924

The new No. 915 barhanger made by the M. B. Austin Company, 108 South Desplaines Street, Chicago, is specially designed to take all standard 1½-in. deep outlet boxes when used with plaster ring. The depth of the offset

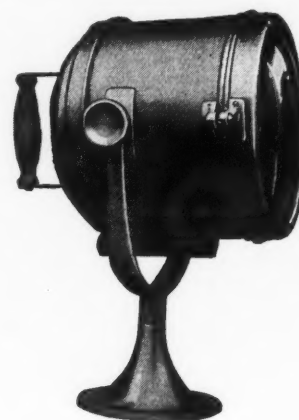
is made to bring the mouth of the cover flush with the plaster line. The box is then covered with the canopy of the fixture and the old method of blocking-in is eliminated. The little sliding stud permits the box to be adjusted to any desired location between the joist and also serves as a fixture stud.



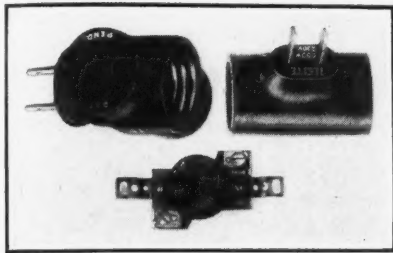
Incandescent Searchlight for Motor Boat or Yacht

Electrical Merchandising, April, 1924

One model of the marine searchlight equipment made by the Carlisle & Finch Company, Cincinnati, Ohio, is the 1-M motor boat searchlight illustrated. It is made in two sizes and styles, 10-in. and 12-in. and with deck control for placing on forward deck or with pilot house control for placing on the cabin or pilot house. Incandescent lamps of 6, 12 or 32 volts are used.



What's new on the market? These pages will tell you. ➡



Parallel-Blade Plural-Type Plugs

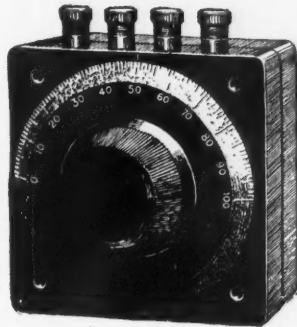
Electrical Merchandising, April, 1924

The two plugs shown are of standard-blade construction, with plural outlets. They are unusually compact in appearance and were especially designed to overcome the clumsy feature of some types of plural plugs now in use. The third "Ileite" device is a base receptacle which can be installed in the shallowest outlet box. The manufacturer is the Electra Brokerage Corporation, 19 Hudson Street, New York City.

Radio Frequency Transformer

Electrical Merchandising, April, 1924

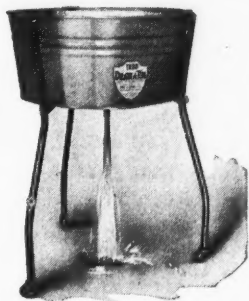
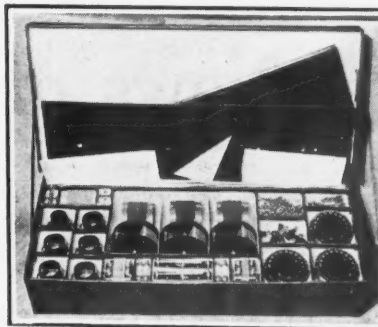
The Type "P" plusiformer made by the Pathe Phonograph & Radio Corporation, 20 Grand Avenue, Brooklyn, N. Y., is interchangeable and can be used, the company suggests, to build radio receivers comprising combinations heretofore considered relatively impossible. The most outstanding feature, it is pointed out, is the fact that through the use of this plusiformer a tuned radio frequency amplifier which is free from self-oscillation may be built. Several suggested layouts for the various circuits made possible with the plusiformer are contained in the company's descriptive booklet. Intended price of transformer \$8.50.



Knocked-Down Radio Set

Electrical Merchandising, April, 1924

All the necessary parts for a five-tube neutrodyne radio set are included in the new outfit made by the WorkRite Manufacturing Company, 1812 East Thirtieth Street, Cleveland, Ohio. The drilled panel, baseboard, complete instructions and mounting angle are packed in a neat box that may be afterward used for a radio tool box. The outfit is made to sell at \$70; in mahogany cabinet, \$80.



Portable Tub

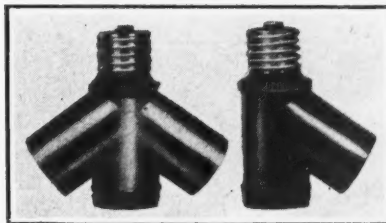
Electrical Merchandising, April, 1924

An improved model of its "Drain-A-Tub" has been brought out by the Todd Company, 1106 Walnut Street, Kansas City, Mo. The new tub, like the company's previous model, was designed to eliminate the lifting and carrying of water for washing, is made to drain in two minutes and may be used with any style washing machine. It is fitted with specially designed casters so that it moves at the touch of the hand. Detachable legs permit its being kept in a very small space.

Plural Plugs

Electrical Merchandising, April, 1924

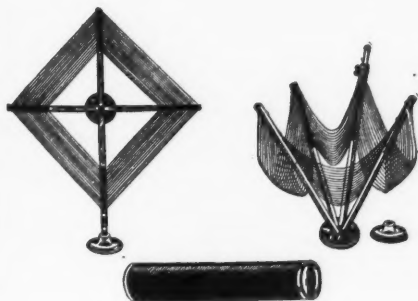
For use anywhere in the house, from the basement workshop to the elaborate living room, the Electra Brokerage Corporation, 19 Hudson Street, New York City, has designed the double and triple-service plugs illustrated. The marked characteristic of the new "Ileite" devices, the manufacturer points out, is the gracefulness of design which renders them appropriate for use even in the most artistically-appointed room. Made of bakelite.



Folding Loop Aerial

Electrical Merchandising, April, 1924

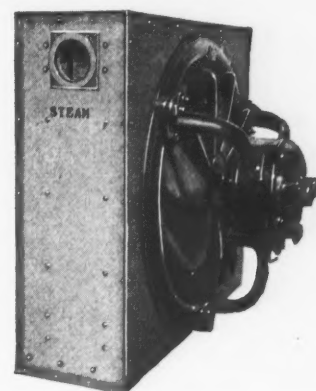
A loop antenna that opens and folds like an umbrella has been brought out by the J. Nazeley Company, 571 Hudson Street, New York City. It is designed to have a natural period of 145 meters and when shunted by a 23-plate variable condenser to respond to a wave length of from 190 to 650 meters. The loop is 30½ in. high and 28 in. wide. By an ingenious folding design it is inserted in a rigid pressure-resisting tube 3-in. in diameter and 16½ in. in length, the two ends of which are sealed by the center flange and the base of the loop. Intended retail price, \$7.00.



Unit Heater for Factories and Other Large Areas

Electrical Merchandising, April, 1924

The outstanding characteristic of the new "Venturafin" heating unit made by the American Blower Company, Detroit, Mich., is its compactness which is made possible, the company explains, by the design of the heating surface, each square foot of which is made to radiate five times the heat that can be given off by a cast iron heating surface of the same inside dimensions. Each "Venturafin" section includes a standard motor driven "Ventura" fan as part of its construction. Intended selling price, \$240.



Continued on fourth page following, for your convenience in clipping and filing.
Each item will fit a 3 x 5 in. standard filing card.

News of the Electrical Trade

We have one chief complaint to make regarding your publication, and that is it is printed only once a month.

*Bancroft & Fletcher Company,
Portland, Me.*

We get many good pointers out of your magazine each issue, and hardly see how you could improve it.

*Schwebach & Schmidt,
Dell Rapids, S. D.*

Eastern Electragists Convene at New York

Evils in the electrical distribution system, involving such destructive practices as the granting of wholesalers' discounts to those doing retail business and of contractors' trade prices to purchasers incapable of installing the equipment without the aid of contractors, were uncovered and condemned, and solutions suggested, in a report by W. Creighton Peet, chairman of the Electragists' merchandising policy committee, read before the eastern division convention, Association of Electragists International, March 18, at the Hotel McAlpin, New York City. The full text of this important report is not to be released by the association until later.

On March 17, preliminary to the convention of the Eastern Division, sessions of the association's executive committee were held in New York City. On the morning of March 18, the Union Shop and Closed Shop Sections of the eastern division, also held sessions. Both groups discussed matters of section organization, L. K. Comstock, of New York City, presiding at the Union

Shop meeting, and Joseph G. Crosby, of Philadelphia, at the Open Shop meeting.

President James R. Strong, of the International association, presided at the afternoon session. The program consisted of speeches followed by open discussions. Mr. Peet's report opened the session and in the absence of the author, in Central America, the paper was read by Laurence W. Davis, secretary and treasurer of the association. In a talk on the National Electrical Code, A. Penn Denton, of Kansas City, chairman of the A. E. I. code committee, urged that local contractor organizations refuse to permit test installations of equipment that is not up to Code standards. Other talks included: "The Electragist," by Joseph G. Crosby, Philadelphia, chairman of the publication committee, and "Co-operation in California," by Clyde L. Chamblin, San Francisco, Pacific division executive committeeman. P. B. Zimmerman, National Lamp Works, Cleveland, Ohio, outlined the elaborate plans now being laid for a national lighting educational campaign, built around an essay contest.

The evening was devoted to a dinner dance, followed by dancing, in the Hotel Winter Garden. Joseph A. Fowler, of

Western Electric Appliance Sales Conference, French Lick—March 3-7



Under the chairmanship of F. H. Barber, appliance sales manager of the Western Electric Company, a general sales conference of the company's appliance interests was held at French Lick Springs, Indiana, March 3 to 7. The company's

general department was represented by: G. E. Cullinan, C. A. Flint, C. L. Funnell, C. C. Graham, E. A. Hawkins, Herbert Metz, E. W. Shepard, J. R. Tulloch and H. W. Herring. The above is the jolly group that attended.

Conventions Ahead

NATIONAL ELECTRIC LIGHT ASSOCIATION, ANNUAL CONVENTION, Atlantic City, N. J., May 19-23.

NATIONAL ELECTRICAL CREDIT ASSOCIATION, ANNUAL MEETING, Congress Hotel, Chicago, May 22-23.

ELECTRIC POWER CLUB, Sea View Golf Club, Absecon, N. J., May 26-29.

ELECTRICAL SUPPLY JOBBERS ASSOCIATION, EXECUTIVE AND MERCHANDISE COMMITTEE MEETINGS, The Homestead, Hot Springs, Va., June 2-3.

ELECTRICAL SUPPLY JOBBERS ASSOCIATION, GENERAL MEETING, The Homestead, Hot Springs, Va., June 4-6.

ASSOCIATED MANUFACTURERS OF ELECTRICAL SUPPLIES, ANNUAL MEETING, Hotel Ambassador, Atlantic City, June 24-27.

Memphis, Tenn., executive committeeman from southern division, was the speaker of the evening.

One Program Broadcast Over Whole Hemisphere, March 7

An epochal relay broadcast experiment was conducted March 7 in connection with the dinner of the alumni of the Massachusetts Institute of Technology at the Waldorf-Astoria, New York City, when the whole American continent as well as England and part of Europe was covered with this single program.

Station WJZ, the Radio Corporation's New York City station, was directly connected to the microphones in the banquet hall. Signals were also conveyed via wire to Schenectady at which place General Electric station WGY broadcast on 380 meters for radio listeners tuned in to the station's wavelength, and also at 105 meters to energize the next relay station, KDKA at East Pittsburgh, Pa. The Westinghouse station also broadcast on two wavelengths, 326 meters and 94 meters,



W. D'Arcy Ryan, consulting illuminating engineer, Schenectady, N. Y., has not only lighted every exposition and pageant of note, for a generation, but has applied electricity in his own home on something of the same spectacular scale of completeness as he paints the night skies. His home, adjudged the most completely electrically-equipped dwelling reported in *Electrical Merchandising's* 1923 "Electrify Your Home" Contest, won him first prize—this keyless, windless, tickless, faultless electric clock which now marks W. D'A.'s restless minutes.

the long wave for its own audience and the short-wave transmission for KFKX at Hastings, Neb., as well as 2 AC in London, England. Hastings then rebroadcast on 108 meters.

The General Electric station at Oakland, Calif., also picked up and rebroadcast to Pacific Coast audiences the proceedings of the banquet in New York. KGO, by using a super-sensitive receiver, picked up the signals from KDKA at East Pittsburgh.

Secretary Hoover's Views On Broadcasting

Herbert C. Hoover, secretary of Commerce, has issued the following statement:

"I am in receipt of many requests for my views as to issues now before the Courts bearing on the control of radio broadcasting. While it is impossible for me to express any opinion on particular issues that are before the Courts or the Federal Trade Commission, I can state emphatically that it would be most unfortunate for the people of this country to whom broadcasting has become an important incident of life if its control should come into the hands of any single corporation, individual or combination.

"It would be in principle the same as though the entire press of the country was so controlled. The effect would be identical whether this control arose under a patent monopoly or under any form of combination, and from the standpoint of the people's interest the question of whether or not the broad-

casting is for profit is not material.

"In the licensing system put in force by this Department the life of broadcasting licenses is limited to three months so that no vested right can be obtained either in a wave length or a license. I believe it is safe to say irrespective of claims under patent rights on apparatus that broadcasting will not cease and neither will our public policy allow it to become monopolized."

Large Phonograph Company to Co-operate with Radio

Through an agreement just signed between the Radio Corporation of America and the Brunswick-Balke-Collender Company, phonograph manufacturers, millions of radio fans throughout the United States will receive for the first time operatic and musical programs rendered by famous artists whose services hitherto have not been available to the broadcasting companies. This contract will not only effect a marked improvement in future broadcasting programs, but involves the sale of combined Radiola-Brunswick phonographs, and indicates that large interests in the phonograph industry have now determined to combine the features of radio and the phonograph in a single instrument.

Under the contract, the phonograph company gains the right to install radio receiving sets in combination with Brunswick phonographs. In turn, the

phonograph company will add its share to the public service now rendered by the principal broadcasting stations and aid the development of free broadcasting to the public, by permitting the stations of the Radio Corporation and those of its manufacturing associates, to broadcast from the laboratories of the Brunswick Company during the periods when its artists are recording for phonograph reproduction.

The areas that will benefit particularly by this new arrangement are those served by the broadcasting stations of the Radio Corporation of America, the General Electric Company and the Westinghouse Electric and Manufacturing Company, in New York; Washington; Chicago; Hastings, Neb.; Springfield, Mass.; Schenectady, N. Y.; Pittsburgh, Penn.; and Oakland, Cal.

The Philadelphia Electrical Contractors' Association has been organized, with headquarters at 2222 North Broad Street, Philadelphia. The association is made up of electrical contractors doing house wiring and has as its definite objects, the securing of "registration" of electrical contractors in the city of Philadelphia, co-operative purchasing among its 100 members, and the elimination of price cutting through education of the public. Morris G. Paul is president, Harry W. Adams, vice-president, C. Russel Snyder, treasurer and G. Gale Wilson is secretary of the new association.

Men Who Are Directing the Activities of the Society for Electrical Development—III



J. R. STRONG, Director

When an electrical man thinks of the Association of Electragists International, he thinks of James Remsen Strong, president of the association at intervals from 1905, when it was the National Association of Electrical Contractors and Dealers, down to the present date. Since 1890 he has been president of the Tucker Electrical Construction Company, of New York City. Mr. Strong has a particular genius for association organization, and stands today among that small group who have made the organization of electrical contractors.



G. E. CULLINAN, Director

His broad contact with the national problems of sales and distribution makes George E. Cullinan one of the electrical industry's most valued counsellors. Upon his graduation from Williams College in 1901 he entered the employ of the Western Electric Company. After serving 21 years in the company's New York, St. Louis and Chicago offices, he was appointed general sales manager about a year ago. While in Chicago he was a member of the executive committee of the Chamber of Commerce and a director of a large bank.

The HOOVER



Hoover advertising will carry this illustration in eight national magazines, with a total circulation of 12,650,000, during April

Remarkable new Attachments increase value of Hoover Franchise

Now added to the acknowledged advantages of The Hoover over ordinary electric cleaners, is the most remarkable set of air-cleaning attachments ever devised. This means

- *new business with Hoover owners*
- *increased business with Hoover prospects*
- *still greater desirability from the consumer's standpoint*
- *increased profit for the dealer*

Women are quick to see how with these new attachments they can air-clean draperies, fixtures, furniture and furnishings as effectively as they can beat, sweep and clean floor coverings with The Hoover.

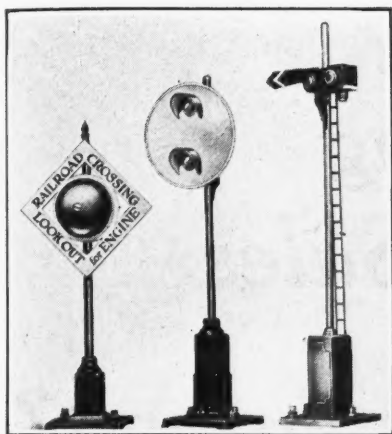
They instantly recognize the ease and security with which these attachments *connect and lock*—the naturalness and readiness with which the *swivel connection* adapts, without strain, the position of the cleaning tool to corners, joints and curved surfaces.

The tools include the remarkable new combination nozzle-brush, suitable for practically every cleaning purpose, fitted with rubber bumper to protect polished surfaces, the flat fibre tool and the two metal extension tubes.

These splendid new attachments make the Hoover franchise more valuable than ever to progressive dealers. When may our representative call and explain to you the many profitable advantages of the Hoover sales plan?

THE HOOVER COMPANY, NORTH CANTON, OHIO
The oldest and largest makers of electric cleaners
The Hoover is also made in Canada, at Hamilton, Ontario

It BEATS... as it Sweeps as it Cleans



Toy Train Accessories

Electrical Merchandising, April, 1924

The toy railroad magnate who owns a miniature railroad or two, will be an eager prospect for the three new signals illustrated, recently brought out by the Ives Manufacturing Corporation, Bridgeport, Conn. The signal to the extreme left is of the bell-crossing type and is an exact reproduction of the large railroad signals. The second device is an automatic double-lighted target signal, similar to the type which has lately been adopted by many of the leading railroads of the country. The signal to the right is of the automatic block semaphore type, the arm of which drops and raises automatically, as the train approaches and after it has passed.



Electric Churn

Electrical Merchandising, April, 1924

No belts, pulleys, framework or troublesome mechanisms are required to effectively operate the two new models of the "Dandy" electric churn made by the Taylor Bros. Churn & Manufacturing Company, 2951 North Market Street, St. Louis, Mo. The No. 4 churn (illustrated) is made of glass in 3-qt. and 4-qt. sizes while the No. 8 unit is made in 2-gal. and 3-gal. sizes, of tin, in blue enamel finish. Both models have three-piece wood dasher, the rod of which is easily detached for cleaning. The 3-qt. size is listed at \$22.50, the 3-gal. size at \$30.

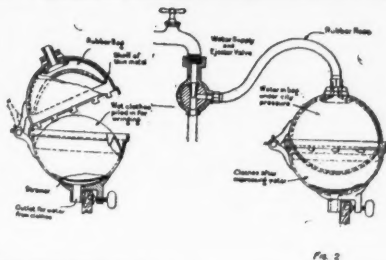


Fig. 2

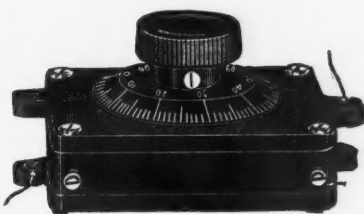
New Merchandise to Sell

(Continued from second page preceding)

Straight-Line Condenser

Electrical Merchandising, April, 1924

As the accompanying illustration shows, the new "Rico" straight-line condenser brought out by the Radio Industries Corporation, 131 Duane Street, New York City, is radical in design. One complete revolution of the dial, it is pointed out, adjusts the condenser from minimum to maximum, and it is made to work in any position, vertical or horizontal, without the use of counterweights. Measures $3\frac{1}{2} \times 2\frac{1}{2} \times 1\frac{1}{2}$ in. overall, with ratings of 0.001 mfd., 43-plate capacity; 0.0005 mfd., 23-plate capacity; and 0.00025 mfd., 11-plate capacity. Listed at \$1.75.



Luminous Pendant

Electrical Merchandising, April, 1924

The new luminous pendant made by the Eagle Electric Manufacturing Company, 38 South Eighth Street, Brooklyn, N. Y., is $1\frac{1}{2}$ in. long and $\frac{1}{2}$ in. wide. The cap has bright brass finish. These pendants are issued to the dealer on an attractive two-color display card, 24 pendants to the card. The company also manufactures a luminous switch plate button to complete a line of luminous locating devices. Listed at 25c.

Radio Headset

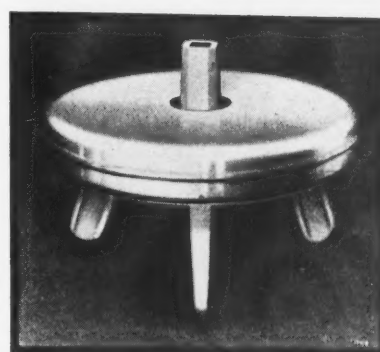
Electrical Merchandising, April, 1924

The Magnus Electric Company, Inc., Greenwich and Desbrosses Streets, New York City, has brought out a 2,200-ohm radio headset, known as No. 581. It weighs $10\frac{1}{2}$ oz. net and is specially constructed with encased cord connections and telephone cord strain relief. Listed at \$6.

Wringer—Rollerless—Operates on Water Pressure

Electrical Merchandising, April, 1924

A radical newcomer in the home laundry appliance field is the clothes wringer designed by George C. Graham, president of Beaudette & Graham, 915 Boylston Street, Boston, Mass. The wringer consists of a metal sphere-shaped unit divided—geographically speaking—into two hemispheres, or upper and lower portions. Into the lower portion the wet clothes are placed. Into the upper portion there has been fitted a rubber bag, which, when filled with water from the ordinary faucet by means of a hose presses down on the clothes and ejects the water, thus wringing them, it is claimed, in half the time usually required. It is pointed out that only 30 lb. of water pressure is necessary to dry the clothes, but by using a booster valve, even a 10-lb. pressure will operate the wringer. The device can be fastened to the edge of a tub or mounted in the manner of the swinging wringer of an electric washing machine. It is made in difference sizes, from the 12-in., 3-sheet capacity to the 36-in., 60-sheet capacity.



Floating Metal Dasher for Washing Machines

Electrical Merchandising, April, 1924

The "Foto-Plane" agitator is the latest improvement offered by the Voss Brothers Manufacturing Company, Davenport, Iowa, in the construction of its washing machines. It may be used on any dasher-type model of Voss washer, therefore will serve to replace the wooden dashers now in use on the company's machines. The wings and the main part of the agitator are made from one solid piece of aluminum while the "float," which serves only to give buoyancy to the agitator, is a separate air-tight chamber made of heavily tinned brass.

All-Steel Connector Plug

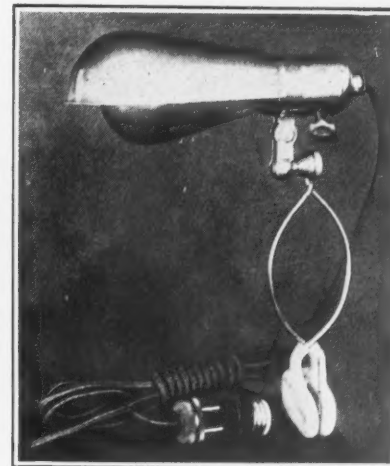
Electrical Merchandising, April, 1924

To eliminate the habitual annoyance to the housewife by the breaking and chipping of the connector plug, the Simplex Electric Heating Company, 85 Sidney Street, Cambridge, Mass., has developed an all-steel plug which, the company claims, will not chip, crack, crumble or break. A bakelite ball grip on the anti-kink spring provides a convenient means of connecting and disconnecting the iron. Another feature claimed for the ball grip is that it, in combination with the spring which connects it to the plug, permits a quick break of the circuit when detaching the iron, thus eliminating excessive arcing and consequently prolonging the life of the contacts of the iron. Intended to sell at \$1.75.

Extension Lamp

Electrical Merchandising, April, 1924

By means of an adjustable spring grip with which the "Grip-O-Lite" is provided, this convenient little lamp can be attached almost anywhere. A universal ball and socket joint makes it possible to adjust the lamp so that the light will be thrown where most needed. Manufacturer, A. B. Stewart & Company, 225 West Huron Street, Chicago. About \$3.



Continued on the second page following for your convenience in clipping and filing.
Each item will fit a 3 x 5 in. standard filing card.

We're Boosting Summer Radio Sales

—Will you help us help you?



THE radio industry is out to build summer sales. Brandes is backing the movement with a whale of a campaign in the Saturday Evening Post and a dozen other sales-producing periodicals.

We've printed a new folder for you—"Radio—All Summer Long."

And a stunning eight-color window display that will stop the speediest passer-by.

And what will *you* do? Keep all your pep behind selling during the summer. Read the Brandes ads—use their talking points for summer radio. Distribute the new folder. Show the new window display.

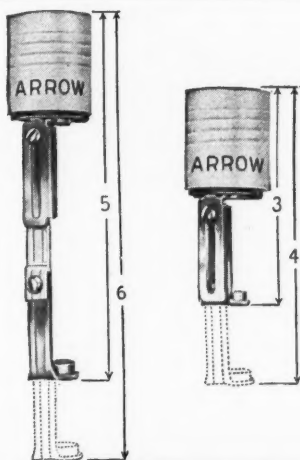
Talk summer radio—believe in summer radio—and you'll find your sales mounting steadily, speedily, surely.

C. BRANDES, Inc.
237 Lafayette Street, New York City



Brandes

The name to know in Radio



New Merchandise to Sell

(Continued from second page preceding)

Sockets for Candle Fixtures

Electrical Merchandising, April, 1924

The outstanding advantage of the two candle sockets shown, made by the Arrow Electric Company, Hartford, Conn., is the extension hickey with which each fixture is equipped. This feature enables No. 4007 to be extended from 3 in. to 4 in. and No. 4007-A from 5 in. to 6 in. These keyless sockets have ratings of 660 watts, 250 volts.

Electric Water Heater

Electrical Merchandising, April, 1924

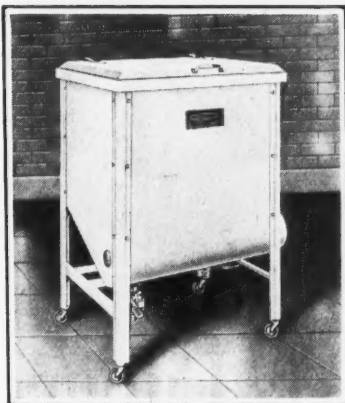
That it "heats as it flows" is claimed for the automatic electric water heater made by the Mechanical & Electrical Manufacturing Company, Inc., Berlin, N. H. "There is no waste of electricity by heating more water than is needed,"

the manufacturer declares, "for the current is automatically controlled and electricity is consumed only when hot water is drawn." The temperature of the water is controlled by increasing or decreasing the flow of water at any hot water faucet. The heater is 36 in. long, 5 in. in diameter and weighs 24 lbs.

Electric Dishwasher

Electrical Merchandising, April, 1924

The space required for the new FW "Family" dishwasher made by the Lakeside Manufacturing Company, Madison, Wis., is 24 in. x 26 in., including space for backward swing of the lid. The machine will hold the dishes used by nine people for three meals and needs but 1 gal. of hot water for washing and 1 gal. for rinsing. It is mounted on rubber-tired casters and may be used in the pantry or kitchen or wherever desired. It is operated by a $\frac{1}{4}$ hp. motor and is finished in white enamel.



Automobile Lamp for Fixed-Focus Service

Electrical Merchandising, April, 1924

To improve road conditions at night and to eliminate the blinding glare of passing cars, the National Lamp Works has developed a new fixed-focus head-

light lamp. It has been the aim of the company to produce a lamp of such accuracy as to make it interchangeable in a headlamp socket without materially affecting the headlight beam, in other words, to eliminate the more troublesome focusing adjustment and so make the procedure of renewing a burned-out bulb as simple as replacing a lamp in the kitchen.



Urn Percolator

Electrical Merchandising, April, 1924

The "Rowenta" is a new urn-type electric percolator of English manufacture. It is made by the Welsbach Light Company, Ltd., Welsbach House, King's Cross, London W. C. 1., and is described as a nickel-plated brass appliance, highly polished, with a removable aluminum coffee container and strainer and fitted with two wicker-covered handles. It is made in four-cup and eight-cup sizes, for 110 and 220 volts.

Battery-Charging Connector

Electrical Merchandising, April, 1924

The "Vari-Rate" connector made by the Hobart Bros. Company, Troy, Ohio, consists of a special clamping element to be fastened to the bus bars and into which clamping element are built a special carbon-pile resistance and an ammeter to show the rate of charge going into the battery. By the use of this connector any constant potential-charging outfit may be modified, without the necessity of using a number of varying resistance connectors.



Cabinet-Enclosed Radio Set

Electrical Merchandising, April, 1924

A modified type of the Radio Corporation's former "VII" is being introduced. It is known as the VII-B and is inclosed in a mahogany-finished cabinet 23 $\frac{1}{2}$ in. long, 17 $\frac{1}{2}$ in. deep and 12 $\frac{1}{2}$ in. high, with an adjustable drop hood that opens and closes like a phonograph. The loudspeaker is completely built in and ample space is provided within the cabinet for all batteries. The Radiola VII-B is a five-tube coupled-circuit receiver with detector, two stages of radio-frequency amplification and two-stages of audio-frequency amplification provided by five UV-199 dry cell Radiotrons.

Radio Tuner of Variocoupler Type

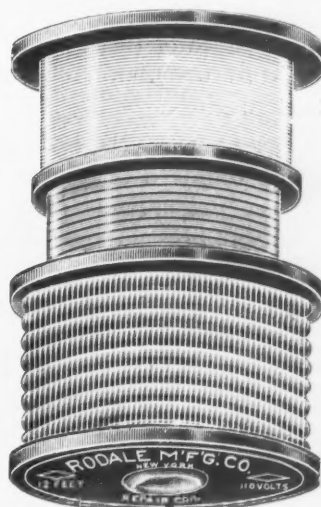
Electrical Merchandising, April, 1924

"Unlike the older variocouplers used in regenerative circuits," says the Federal Telegraph & Telephone Company, Buffalo, N. Y., of its new tuner, "the secondary of this new device is completely divorced from the primary. The closest which they can be set approximates three inches, making it possible to secure a high degree of selectivity without sacrificing the signal strength."

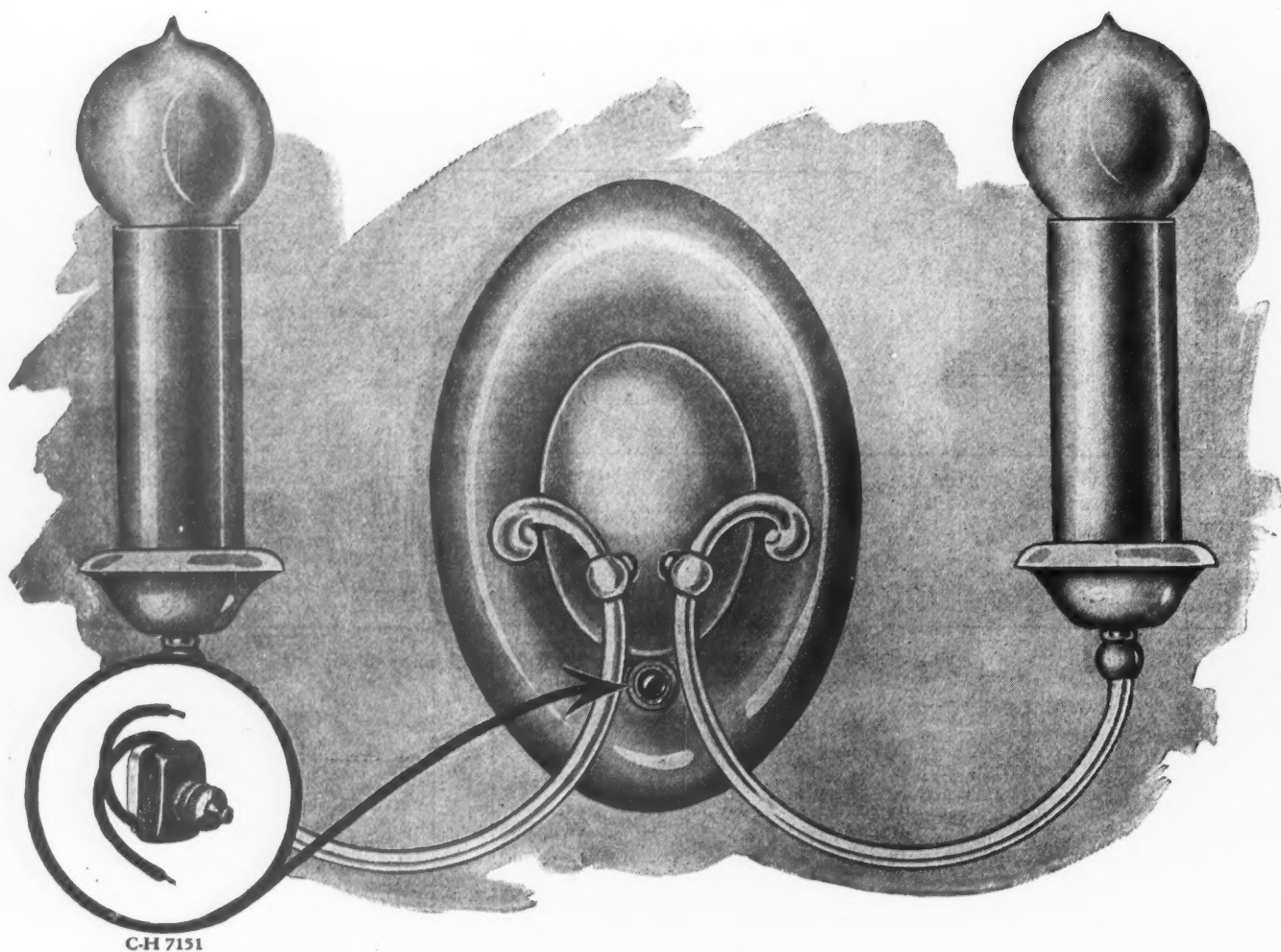
Nichrome Wire for Repair Work

Electrical Merchandising, April, 1924

A three-legged spool which contains a full assortment of Nichrome wire for general repair work on various types of electrical appliances has been brought out by the Rodale Manufacturing Company, 265 West Broadway, New York City. The spool is built in three sections. The first section contains 12 ft. of spirally-wound Nichrome wire; the second, 50 ft. of flat Nichrome ribbon; and the third, 100 ft. of original plain Nichrome wire.



Continued on second page following, for your convenience in clipping and filing. Each item will fit a 3 x 5 in. standard filing card.



C-H 7151

Where Space Is Limited

For use on two-light brackets, and on single brackets where the switch is located close to the bracket arm—the ease of operation of the *Push-and-Pull* Switch is forcibly demonstrated. The limited space does not prevent grasping the switch button with the tips of finger and thumb—which is ample for the operation of the C-H *Push-and-Pull* Switch. Try this yourself.

Besides this easy operation, C-H Canopy Switches are selected for their long life, quick make-and-break mechanism. They safeguard fixture manufacturers against troubles that reflect adversely on their product.

For 15 years, the C-H *Push-and-Pull* Switch has been recognized as the standard of quality—working parts are all enclosed and well constructed, and as an additional precaution against grounds or short-circuits, a fibre cap is fitted over the body. It is the smallest switch with real quick make-and-break mechanism—3A, 125V; 1A, 250V.

Your orders placed now will insure delivery when required.

THE CUTLER-HAMMER MFG. CO.

Switch and Specialty Department

Works: MILWAUKEE and NEW YORK

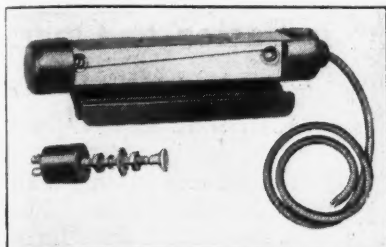
Another type, the C-H Shallow Rotary Switch, is made for such locations where the depth required for the C-H *Push-and-Pull* Switch is not available. The Rotary Switch measures less than $\frac{1}{2}$ -inch overall and the diameter is only $\frac{15}{16}$ ". There is no need for cutting away plaster when installing. The switch button may be removed as well as the finish nut, with the switch remaining intact. This is an advantage when refinishing bracket. C-H 7147 is for sheet metal canopy or plate and C-H 7148 for cast metal.



C H 7147



CANOPY SWITCHES



Electric Windshield Dryer

Electrical Merchandising, April, 1924

One way to overcome the annoyance of the frosted windshield is by the use of the new electric windshield dryer made by the Fulton Company, Milwaukee, Wis. The device is attached to the windshield with the heater facing the glass. When contact is made by a control mounted on the dash, the heat radiates from the coil and dries a sufficiently large part of the windshield to enable the driver to operate the car with safety. The dryer is designed for use with any make of car and its intended retail price is \$3.50.

Curling Iron

Electrical Merchandising, April, 1924

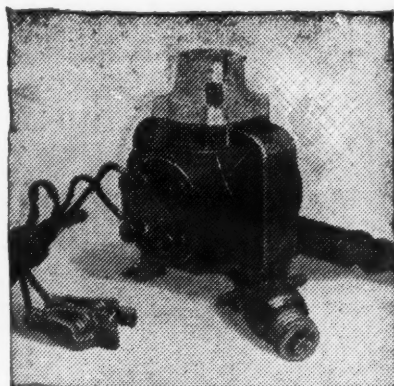
The Fitzgerald Manufacturing Company, Torrington, Conn., is now making a "Star-Rite" electric curling iron that has a handle of two-piece design, constructed to eliminate the usual and troublesome "kinking" of the cord.



Battery Charger

Electrical Merchandising, April, 1924

Operating from the ordinary lighting circuit, the "Acme" battery charger, made by the Acme Electric & Manufacturing Company, Hamilton Avenue, Cleveland, Ohio, is designed for double-duty work—to charge radio "A" and "B" and automobile batteries and to operate small electrical toys. For use with the electric toys, the charger has six steps of voltages ranging from 2 to 16, has a 100-watt capacity and will operate motors, trains, bells, buzzers and low voltage lamps. An "Acme" charger for use with direct current is also made by the company.



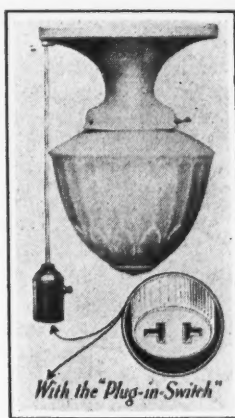
New Merchandise to Sell

(Continued from second page preceding)

Unit Heater for Industrial Plants

Electrical Merchandising, April, 1924

To direct the heat downward to the floor or working level, in buildings of wide area and high ceilings, the L. J. Wing Manufacturing Company, 352 West Thirtieth Street, New York City, has brought out a new "Featherweight" unit heater of light weight and small dimensions for convenient overhead installation.



Kitchen Light with Convenience Outlet Attached

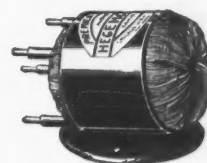
Electrical Merchandising, April, 1924

The "Plug-In-Switch" used on the new No. 400 kitchen lighting unit made by the Quadrangle Manufacturing Company, 553 West Monroe Street, Chicago, is a pendent switch to control the light, combined with an outlet that is within reach for convenient use. The holder is finished in white porcelain enamel. It is 8½ in. in diameter with screwless device automatically adjustable to take any globe having a 4-in. fitter.

Audio Frequency Transformer

Electrical Merchandising, April, 1924

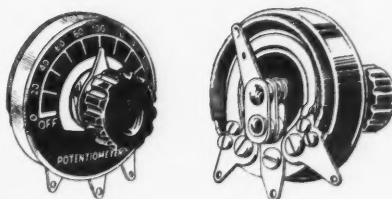
The "Hegehog" audio frequency transformer made by the Premier Electric Company, Grace and Ravenswood Avenue, Chicago, in appearance, is about the size of an English walnut. The windings are high wound (No. 44 copper wire on both primary and secondary), and by a vacuum-process impregnated against moisture, etc. The transformer may be obtained in different ratings: No. 103, ratio 1 to 3; No. 104, ratio 1 to 4; No. 105, ratio 1 to 5; and No. 110, ratio 1 to 10. About \$3.50 and \$4.50.



Potentiometer

Electrical Merchandising, April, 1924

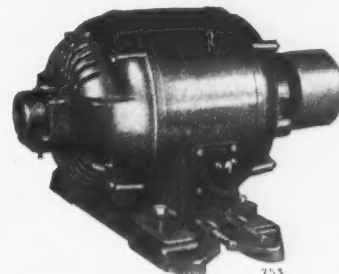
Both front and back views of the new potentiometer made by the Premier Electric Company, Grace and Ravenswood Avenues, Chicago, are shown here. This new "double disconnect" device incorporates in its design a double break switch which automatically disconnects both the "A" and "B" batteries from the resistor when the lever is turned to the "off" position. About \$2.50 and \$3.



Electric Motor

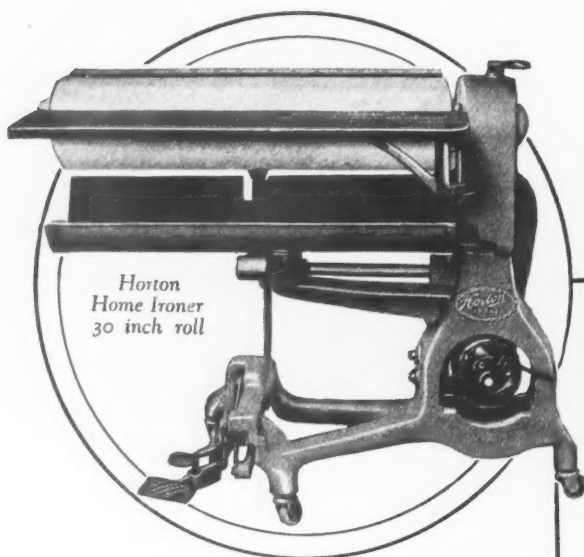
Electrical Merchandising, April, 1924

A new type of "RA" repulsion induction motor is being announced by the Robbins & Myers Company, Springfield, Ohio. Some of the outstanding features of the new motor are the brush-lifting device designed to actually lift the brushes off the commutator; the grated commutator cover with hinged top-half for ready access to brushes; spring-hinged oil-well cover; and reversible terminal box with removable cover. The motor may be obtained in sizes up to 7½ hp.



Continued on second page following for your convenience in clipping and filing.
Each item will fit a 3 x 5 in. standard filing card.

The Women to whom you've sold Washers— now look to You for HORTON IRONERS



Horton
Home Ironer
30 inch roll

EVERY woman to whom you've sold an electric washer, perhaps a Horton, is the best possible prospect for a Horton Ironer.

These women are educated to electrical appliances. Through experience, they're sold on electrical laundry equipment. They're ready now for a Horton Ironer. They need but your assurance, Mr. Dealer, that the Horton Ironer which you offer them is as efficient and practical as their washer. When you know the Horton you can conscientiously tell them just that.

Horton Ironers Offer Greatest Sales Possibilities in the Appliance Field Today!

With the electric ironer field a 95% sales opportunity—the Horton Ironer offers the greatest immediate sales possibilities in home appliance lines today. It is compact. Because of the complete open end design everything can be ironed—100% of the ironing. Simple to operate. Sells at a low price. And, ironing time is cut one-half to three-fourths of the time required by hand.

We would like to present further facts on the Horton Ironer and the policy of co-operation back of it. Will you not give us this opportunity?

HORTON MANUFACTURING COMPANY
1008 Fry Street Fort Wayne, Indiana

Horton

IRONERS

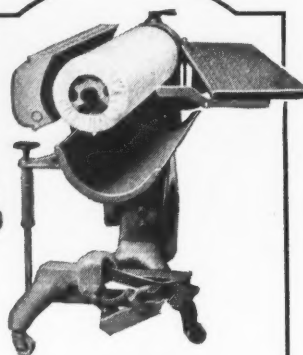
The HORTON is Easier to Operate Because the End is Completely Open

Just as the end of an ironing board is open all around, likewise, the end of the Horton Home Ironer is completely open.

Women are quick to appreciate the ironing advantage of this full open end. It is why the Horton Home Ironer irons everything 100% of the ironing.

Skirts and dresses may be slipped over the roll and ironed without a crease. Ruffles, collars, pleats, neck-bands and the hard-to-reach places are all ironed much easier and quicker.

Another feature quick to catch a woman's attention is the foot control of the Horton Home Ironer. It operates with the same ease as a sewing machine leaving both hands free for guiding work over the roll.



Horton Home Ironer
Showing
Open End View



Horton Ironer
42 or 46 inch roll

HORTON IRONERS Made in 3 Sizes

Horton Ironers are made in 3 sizes, gas heated:

30 inch roll
42 inch roll
46 inch roll

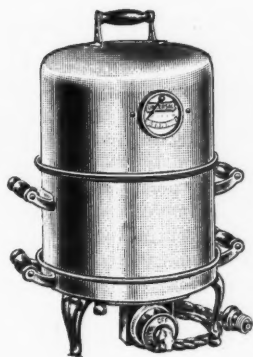
They are also made in 2 sizes, electrically heated:

30 inch roll
46 inch roll

All Horton Ironers are electrically driven.

New Merchandise To Sell

(Continued from second page preceding)



Electric Cooker

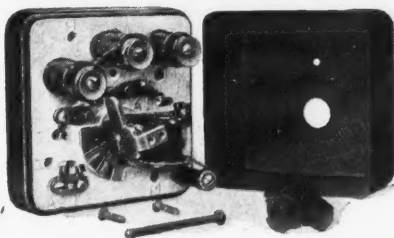
Electrical Merchandising, April, 1924

All the advantages of electric cooking may be obtained in small homes and apartments, where no provision is made for the standard size electric range, by the use of the small electric cooker made by Landers, Frary & Clark, New Britain, Conn. The weight of this new cooking unit is 22 lb., and its height overall but 25 in., so that it will fit in a very small space. The utensils furnished with the cooker are specially designed as to diameter, depth and capacity to give the necessary circulation of heat around the food to be cooked. Operates from the ordinary light socket or any convenience outlet. About \$35.

Starter for Fractional Horse-power Motors

Electrical Merchandising, April, 1924

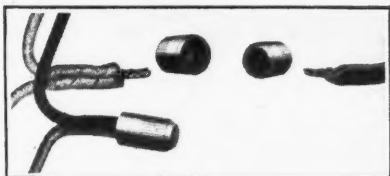
A low-voltage protective device which will automatically open the motor circuit upon the failure of voltage and make it necessary for the operator to re-start the motor, has been brought out by the Ward Leonard Company, Mount Vernon, N. Y. It is designed to provide low-voltage protection for 1/50 to 1/2 hp. d.-c. motors and to limit the starting current so that the motor armature is not subjected to a heavy inrush of current but will be started slowly and smoothly. No. 1414, the 115-volt unit, is made to sell at \$6.25 while the 230-volt type, No. 1422, is \$6.50.



Solderless Connectors

Electrical Merchandising, April, 1924

The Ideal Commutator Dresser Company, 5321 North Western Avenue, Chicago, Ill., is manufacturing a solderless and tapeless wire connector which is waterproof and not easily broken. A steel wire spring embedded in body of the connector cuts into the spliced wire enough to make a perfect contact. The connector screws on like a nut binding the insulation of the winding together.



Neutrodyne Receiver in Knock-Down Form

Electrical Merchandising, April, 1924

Substantially the same electrical elements as are contained in the NR-5 of the Freed-Eisemann Radio Corporation, Sperry Building, Brooklyn, N. Y., will be found in the new knocked-down 5-tube neutrodyne set, KD-50, recently brought out. The new unit comprises two stages of tuned radio frequency with neutralization of capacity coupling, non-regenerative detector and two stages of power audio frequency amplification. No reflex arrangements are used. Intended retail price, \$80.



"B" Battery

Electrical Merchandising, April, 1924

For fastidious radio fans who desire beauty even in the usually-unattractive battery, the Stuart Products Corporation, Chicago, Ill., has brought out a new line of batteries including the 22 1/2-volt variable "B" battery illustrated which is covered with an imitation alligator leather and bears a small gold leaf and red seal on the upper left corner, thereby presenting a pleasing appearance when used with a de luxe radio outfit. The battery has 6 binding posts and measures 6 1/2 in. x 3 in. x 4 1/2 in.



Vacuum Cleaner

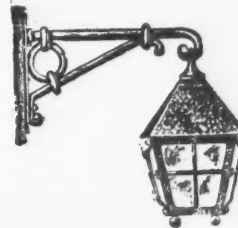
Electrical Merchandising, April, 1924

The switch of the new No. 15 vacuum cleaner manufactured by the B. F. Sturtevant Company, Hyde Park, Boston, Mass., is in the handle, within easy reach of the operator's hand. The handle locks upright automatically and is readily released by the toe. An adjusting slide provides comfortable operation by persons of varying heights. A complete set of attachments is available for use with the machine.

Electric Lantern for Outdoor Service

Electrical Merchandising, April, 1924

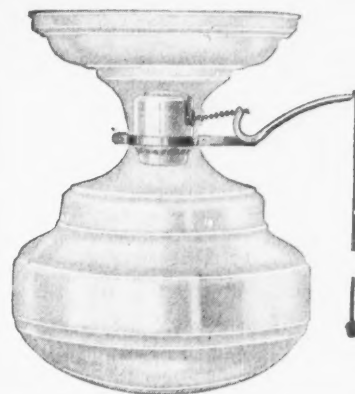
One of "ye olde English lanterns" made by the Terra Cotta Art Company, Inc., 126 East 41st Street, New York City, is the No. 103, illustrated, which is suggested for use on the porch, at gateway and over or at side of doorway. The height overall is 15 in.



Pull Chain Extender for Kitchen Units

Electrical Merchandising, April, 1924

The illustration shows a new device recently brought out by Harvey Hubbell, Inc., Bridgeport, Conn. It is a pull chain extender for use with kitchen lighting fixtures and is equipped with a pull cord of suitable length arranged to prevent the receptacle pull chain from chafing or jarring the glass fixture bowl.



File these items on 3x5 in. cards every month, to keep your stock index up to date.

News of the Trade

(Continued from page 4275)

John Sidebotham, Inc., Frankford, Philadelphia, manufacturer of electrical tapes, has completed negotiations for the purchase of the entire tape plant of the Belden Company of Chicago. The Belden plant will be reestablished in quarters adjacent to the main offices and works of the Sidebotham Company at 4317 Griscom Street, Philadelphia.

The Erner & Hopkins Company, Columbus, Ohio, has taken over the the distribution of General Electric motors in central Ohio. It is also announced that J. R. McCoy, formerly with the Columbus Railway, Power & Light Company and for the past five years assistant commercial manager of the Texas Power & Light Company, has been placed in charge of the Erner & Hopkins new motor department.

The Central Ohio Electric Company, Columbus, Ohio, which has recently been organized to engage in a retail electrical appliances and supply business, has elected as president, E. E. Evans; as vice-president, Boyd B. Had-dox; and as secretary and treasurer, Lloyd W. Granschow.

The Maxam Radio Company, Inc., 55 Tremont Street, Boston, Mass., is operating a chain of stores for the distribution of radio apparatus and materials. The company writes that it would like to hear from manufacturers regarding new radio products put on the market from time to time.

The Portsmouth Electric Service Company, Portsmouth, Ohio, has been

organized to conduct a retail electrical business specializing in household appliances.

Henry D. Sears, distributor of Weber wiring devices, announces the opening of a new warehouse at 131-139 South Desplaines Street, corner of West Adams Street, Chicago. Paul J. Cratty, who has been western representative for more than ten years, becomes western manager and will have his office in the new quarters.

The Cutler-Hammer Manufacturing Company, Milwaukee, Wis., announces the appointment of W. C. Stevens, general sales manager of the company, as director of developments for all departments of the Cutler-Hammer Company. E. S. Crane, for the past three years manager of controller sales at the main offices, has been appointed to succeed Mr. Stevens as general sales manager.

Patrick F. Lyons has announced his resignation as Middle Western district manager of the wire division of the United States Rubber Company. Mr. Lyons became identified with the National India Rubber Company, which was a subsidiary of the U. S. Rubber Company at that time with headquarters at Bristol, R. I., in 1899, representing them in the south and middle west—and becoming district manager when they opened up their Chicago office in 1911. Mr. Lyons is well known in jobbing circles and had just rounded out his twenty-fifth year in the same connection.

W. H. Lamar has resigned as sales manager of the Domestic Electric Company, Cleveland, manufacturer of frac-

tional horsepower motors. E. S. Sabin, Jr., has been named to succeed Mr. Lamar.

The Reliance Electric Inspection Company, New York City, announces its removal to 449-453 West Forty-second Street, "where," says the company, "we will have the full facilities of the service shops of the Maintenance Company, Inc."

The Mann Electric Supply Company, of Columbia, S. C., has been named by the Westinghouse Electric & Manufacturing Company to distribute Westinghouse electrical apparatus in the State of South Carolina.

The Triangle Conduit Company, Inc., Chicago, has just moved from 2001 West Pershing Place to the Fairbanks, Morse & Company Building, Loomis and Thirty-eighth Streets, as the result of its need for increased space. The Triangle company was established in Brooklyn in 1915, and three years later the Canadian Triangle Conduit Company, Limited, was formed. In 1920 the Chicago factory was established at 1965 West Pershing Road, and a year later the factory was moved to larger quarters at 2001 West Pershing Place. Now the plant has been moved to the Fairbanks, Morse & Company Building on Loomis Street at Thirty-eighth, where greater facilities and larger floor space have been secured. James R. Strong, is president of the company; V. C. Gilpin, vice-president; and J. E. McAuliffe, secretary and treasurer—all with headquarters in Brooklyn. B. Duran is manager of the Chicago factory under the general supervision of Thomas W. Bibber, general western manager.

The Rutenber Electric Company, Marion, Ind., manufacturers of Marion heating appliances, has reorganized its sales force as follows: W. B. Blake, general manager, formerly manager of the Bijur Motor Company, is the active directing head, assisted by H. R. Northrop, who has been taken out of his territory, comprising Virginia, Maryland, Washington, D. C., and part of Pennsylvania and W. Virginia, being succeeded in that territory by Norman W. Gerhardt. In the northeast central states the company is now represented by Fred D. Harvey, with headquarters at Detroit. Mr. Harvey, prior to his association with the Rutenber Electric Company, was with Landers, Frary & Clark Company for twelve years. On the Pacific Coast, with headquarters at San Francisco, the company's representative is now A. E. Carroll, formerly sales manager of the electric range division, the Great Western Power Company. In metropolitan New York, the company is represented by R. E. McConnell; in Boston by A. C. Burleigh; in Chicago, by I. J. Jacobsen, and in St. Louis, by Mr. Cohn, who has been associated with the company for a long time.

The Electra Brokerage Corporation, manufacturer of "Ileite" plugs and receptacles, and one of the pioneers in the manufacture of plugs and devices of the "Ileite" type, has recently moved into a new and up-to-date factory at Singac, N. J.



"Hartford, Connecticut," Mark Twain used to say, "is a town where the business interests co-operate in remarkably brotherly fashion. The local revolver factory encourages on a large scale the passing-out of human existence, and the Hartford insurance interests then step in with emoluments for the Hartford-made widows and orphans. Thus each business group of Hartford plays directly into the hands of the other."

All that, of course was before the days of the American Wiremold Company who, being co-operators in their own right, carry the banner of co-operation far and wide in this country through their representatives here assembled. The group includes D. Hayes Murphy, president; Harry B. Kirkland, vice-president; W. D. Ball, secretary; James M. Foley, assistant treasurer; Louis

S. Zahronsky, comptroller; John A. Carey, William F. Kilray, Eugene E. Card, O. A. Frederickson, Charles E. Rutherford, George M. Armor, all of Hartford; C. C. Sibley, A. F. Hanavan, Geo. P. Beatty, Geo. W. Sundstrom and T. J. Voneschen, all of New York; E. E. Hedler, Walter S. Beckett and William H. Morton, all of Philadelphia; H. C. Biglin and J. E. Levy, of Atlanta; Felix J. Commagere, of New Orleans; H. C. Moran and C. H. VanDerBloom, of Pittsburgh; Edward Rigby and Arnold H. Friend, sales manager of M. B. Austin & Company; C. B. Underwood, Russell L. Jesse, M. B. Austin, Jr., Chicago; Robert J. Thorne, Detroit; O. T. Jenkins, Texas; George A. Gray, Pacific Coast; H. M. Scofield, Syracuse Office; Ray H. Lyons, Hartford Office. They look like a peaceful lot, in spite of Mark Twain.